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OUTING

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OF

SPORT, TRAVEL, AND ADVENTURE

EDITED BY CASPAR WHITNEY

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"I'M DE BES' BULLY STEERSMAN ON DE RIBBER!"

OUTING

VOL. XXXVI.

APRIL, 1900.

No. 1.

THE WAY OF A HALF-BREED.

By W. A. Fraser.

THE Canadian Government doesn't feed an Indian at Stony Mountain jail for seven years for nothing.

He must have done something serious to be fed well, decorated with the iron jewelry, have a trained chaperon, and become really the exclusive ward of the nation.

If he get seven years in all probability he should have been hanged, for the Queen's agents are tolerant of these half-tamed children of the forest.

Maxepeto, a Blackfoot half-breed, had been sent to Stony Mountain for seven years. According to this tale, a white man in his place would have been hanged.

Maxepeto was always bad. Those who knew him best said he was exclusively bad.

When an evil Indian dies—too evil to get into the Happy Hunting Ground—he comes back reincarnated as a half-breed, and Maxepeto was unholy even for a "breed."

It was at Trapper's Landing that the thing happened. Trapper's Landing was within seven miles of the northwest boundary line of the Canadian Territories. Beyond that was a wilderness of spruce, and muskeg, and fierce-running rivers stretching away to the Arctic. In the wilderness were fur animals, Indians, a few white traders, and a deficiency of law and holy writ.

The clay feet of Trapper's Landing rested in the waters of the Saska River, and a box tossed on its current at the Landing would fetch up on the shores of Athabasca, or Great Slave Lakes, over

a thousand miles away; in pieces, of course, for the hell-gate of Grand Rapids would batter it into smithereens, as a coffee bean is smashed in the mill.

Maxepeto knew that water roadway well, clean through to the home of the Musk Ox, in the land that had been cursed by the Gods, and left bare of everything but moss, away to the north and east of Great Slave Lake.

Once he had gone there with a mad Englishman who had a long purse and wondrous rifles of unique make. The half-breed had returned with money enough to develop a highly embellished season of delirium tremens, and some classical Oxford oaths, which he had adapted from the Englishman's vocabulary. Mexepeto's "By Jove! I get me bully squiffy, don't you know!" was a revelation to his coffee-colored brethren. "Oh, he had a *bally* bad time," he assured them.

And as for the Britisher, he had acquired no Musk Ox heads, but had left an ear, three fingers of his right hand, and several toes to bear witness to the "bloody awful climate, don't you know."

If the sporting rifles could have shot through two hundred miles of atmosphere, almost frozen solid, without a stick of wood the size of a pen handle in the whole expanse of it, he might have bagged a bull's head. But together he and Maxepeto tracked their Peterboro canoe up the muddy side of the Athabasca, and he sailed back to England, while the half-breed industriously labored at the propagation of an ecstatic drunk.

Trapper's Landing was the whiskey limit. No man might take the fire-water beyond the territories' borders, and to that end two preventive police abode at this jumping-off place.

With extreme diligence that liquor law was enforced, so that the Landing's soil was more or less always soaked in corn juice. A keg stopped was a keg broached, and liquor drunk was liquor destroyed.

Life at the Landing in consequence was one long jubilee of hilarious precaution; it would have been a sin to let the fire-water go out amongst the benighted redmen of the North.

The Trading Company's Factor was king of this Bacchanalian vale. He was magistrate in the face of the law, and arbiter of all things, in the belief of the Indians. Sometimes when a petty case was on in his court room, which was the store, and it dragged a bit, he would say, with drunken gravity, "Oh. Shoo! Give him three years."

Then court would stand adjourned for a week, and the policeman would bring the case up again at the end of

that time; the magistrate would have forgotten all about it, and probably put the culprit on to work for the company at a dollar-and-a-half a day, under the impression that the man was a victim of somebody's malice.

There were no Courts of Appeal, nothing only the varying moods of the Factor Magistrate to average out justice. Some offenders got ten times the possible

sentence, while others got nothing who should have been hanged.

It was because of this climatic atmosphere that Maxepeto selected Trapper's Landing as his place of abode.

One morning the Factor called Maxepeto into the store and said: "Go and get Nonokasi, and bring her here; I'll marry you."

There was nothing very startling in this sudden command,

because they were all at Trapper's Landing. If the Factor had said, "Here's a pair of new boots for you, *Nichie*," the half-breed would have been more surprised.

That he had never thought of marrying Nonokasi, or for the matter of that any other woman, did not matter in the slightest; the Factor had not consulted

his wishes in the affair—didn't care a mink-skin whether Maxepeto would like to have Nonokasi for squaw or not.

Also what the Indian maiden might think about it was of small moment; Hudson's Bay Factors are supposed to do the thinking for the people in these districts. So he simply said: "Marsh! (Go) bring her soon."

Maxepeto rummaged among the tepees until he found Nonokasi.

"The Ookimous wanting you, I think me," he said in his crook-limbed patois.

The girl brushed her black, glistening hair smooth; tied a bilious-yellow silk handkerchief, with impossible blue designs in the corners, about her neck; threw a Scotch plaid shawl over her shoulders, and silently followed the big half-breed to the company's store. Perhaps the Factor wanted to give her a



"OH, SHOO! GIVE HIM THREE YEARS."

pound of tea, or an order for silk-worked moccasins.

The Factor had been enforcing the law by patriotically destroying much overproof whiskey, so he was enthusiastically primed for the work in hand.

"Stand up there together," he said with maudlin dignity. "Hold on a bit!" and he fumbled in a drawer where much jewelry of unique design and unheard-of metal was kept in disorderly abandon. He fished out a ring with an olive-colored diamond, half the size of the Koh-i-noor, and handing it to Maxepeto said: "Now we'll go ahead. When I shout put it on her finger."

The marriage was more or less legally consummated, with the store assistant as witness.

as he would a pack horse, with tea, sugar, biscuit, tinned jams, fat pork and some household furniture, consisting of a looking-glass, comb, a frying-pan and several yards of gaudy print. He threw a bag of flour on his own broad shoulders, and stolidly led the way over the hill, behind which nestled the smoke-tanned canvas tepees of his red-skinned friends.

"He's a damn bad lot," muttered the Factor, leaning groggily against the door-jamb, as he watched the two figures slouch along the winding trail. "He's a bad lot, but she'll steady him, and it'll take her out of the way."

"By Goss!" muttered the breed, as he labored along under his hundred weight of flour. "What the debbil I want



"WHAT THE DEBBIL I WANT GET SQUAW ME FOR?"

"How old are you?" the Factor asked Maxepeto, the census routine becoming indefinitely mixed up with the other rite in his mind.

"Fifty summers," answered the breed. "And you?"

"Twenty," lisped Nonokasi, covering her face with the red-checked shawl, bashfully.

The Factor pulled a big sheet of brown wrapping paper towards him, made an exhaustive calculation with his pencil and said: "That averages thirty-five. Write them down as thirty-five years old," he added to the clerk.

Then Maxepeto's reward materialized immediately.

"Give them debt for a good outfit," the Factor commanded the clerk.

The bridegroom loaded up the bride

get squaw me for? S'pose the Factor got some game make me marry dat gal."

Then he thought cheerfully of the pork, and the sugar, and the many plugs of black tobacco, and they rose like a barrier between him and the inconvenience of having a wife. Also there was no doubt he had made a friend of the man in charge of the commissariat, the Ookimous. That was as good as a pension. He even might hope to take part in some of the whiskey-destroying bouts.

The marriage was the making of Maxepeto from a worldly point of view. From that time forth he was like the lilies of the field: he toiled not, yet still had raiment—not gorgeous, but shop-made and of wondrous cut—still it was raiment.

Of a free choice work is never included in the curriculum of an Indian. Maxepeto was a specific redman in his abhorrence of labor. There were many things he could do, but best of all could he steer a six-ton flat-boat, carrying a hundred pieces of goods, down through the treacherous rapids of the Saskatchewan River.

And this was the one thing he *would* do. When well loaded with liquor of unquestioned vileness his constant boast was, "I'm de bes' bully steersman on de ribber!"

No man on all that boiling turbulent stream, with its rock-blocked rapids, could handle a boat like the huge half-breed. He liked the danger of it, and the pay was big. There was little manual labor, which was the saving grace of the thing in his eyes.

Two months after his marriage he went down with the first boat of the season; he was gone three moons. The boats never came up the river again—they couldn't; so the pilots always walked back.

Maxepeto tramped up the river bank day after day, and when he was near home cut across the hillside and appeared unannounced in his tepee home.

He should not have come as a leopard stalks a deer. But he was a big, blundering breed, with a thousand-year heritage of savagery in his blood.

That night he came to the store and asked for a bottle of Jamaica ginger for Nonokasi; she was ill, he said.

The next day he came again, and fumbled among the limited stock of patent medicines, and went off with a bottle of fruit salts and a tin of mustard plasters—his wife was worse.

Next day he came back and said she was dead.

The clerk went over to the tepee and had a look at Nonokasi. She was dead, of a surety.

Maxepeto got a few rough pine boards from the Factor, made a rude coffin, and in that she was brought down to the Mission House, so that Father Le Farge might perform the last rites before she was laid away in the little clay cell up on the hillside.

There was no inquest, no bother of any sort; doctors and lawyers, and undertakers and coroners, and the others who make such a serious business of dying, were hundreds of miles away. Trapper's Landing had no time for that sort of thing. When people wanted to die in peace they just died, and nobody bothered them or the friends who were left behind.

There was the body in its rough pine case, down at the Mission House, if anybody wished to look at it. Father Le Farge would return that night, and Nonokasi would be buried next morning, as became a good Catholic.

In the morning, after the simple service, they were carrying the coffin outside to fasten on the cover. Some one tripped on the step and the case fell. The good Father started back with a cry of horror, for the head of the dead girl had rolled to one side.

The slender neck had been completely severed by a sharp knife, and that while she was still alive.

The glazed eyes stared with horrible grotesqueness into the face of the evil Maxepeto as he stood beside the coffin and glared down at his dead victim.

Why he only got seven years no one can say, for he never denied it—but that was his sentence.





THE COURTS AT TUXEDO.

AMERICAN AND ENGLISH RACQUETS AND TENNIS.

By Eustace H. Miles,

Amateur Tennis Champion, Amateur Racquet Champion of America.

THE two games, rackets and tennis (the latter more popularly known in America as "court tennis"), seem to have taken such a firm root in the land, that a comparison of the English and American styles and standards of play appears peculiarly fitting at this time of international match-making. It will be easier to begin with racquets, for in that game the differences are the fewer. In fact, the game seems to have become more or less "set," at least so far as strokes are concerned. If even Tom Pettitt cannot invent some new stroke, then one might almost conclude that no new strokes will ever be invented. The best and most paying stroke in America, as in England, still is (as it has always been) the hard low drive right down the side of the court, close to the side wall. The best and most paying service in America, as in England, is the fast and heavily cut service. Tennis is different; for there is great dispute as to which is the most paying stroke for ordinary purposes, and which is the most paying service.

The differences in rackets in America and England are more in the conditions under which the game is played, and in the strokes which those conditions encourage.

First of all, America has far fewer

courts than England; even when we count Tuxedo as if it were already finished, we still have less than ten. In England there are not only the courts at Prince's, Queen's, Lord's, Manchester, etc., and at Oxford and Cambridge and London University, but there are the numerous army courts and the numerous public-school courts (for example, those at Eton, Harrow, Winchester and Marlborough). There are also several private courts. And all this means more professionals, more players, more competitions, more variety of practice. It means a greater number of players of a high standard. It *should* mean a higher average of play.

Secondly, America has slower courts. Philadelphia has the fastest, and Tuxedo will vie with any English court, for it will be one of Bickley's, and Bickley has the secret of making the fastest courts in the world.

Thirdly, America uses softer balls.

The result of these last two differences, viz., of the slower courts and the softer balls, is seen in the American play. Many American players use the side-walls a great deal. This produces a stroke which is seldom lovely. Again, many American players use the push-stroke, rather than the full and free swing. This also produces a stroke



E. H. MILES.

which is seldom lovely. Add to this the fact that many Americans do not risk trying to kill the ball by a low drive, but prefer to play the safety game, and return it high ; and we shall see that these many Americans play a game which is nearer to squash than to the typical English game of racquets, as played, say, at Queen's Club or Harrow.

There are exceptions, of course. Thus Mr. Quincy Shaw, Jr., of Boston, and Mr. Clarence Mackay, of New York, play a typical English game, and probably would play far better in a fast court with harder balls, than in a slow court with softer balls. They and Mr. Austin Potter, of Boston, and some others have all the severity of the English stroke.

Besides this, it is probable that the slower court and the softer balls are far better for the average player ; they produce longer rallies, and thereby encourage beginners, whereas fast courts and hard balls have made many a beginner give up the game in despair.

The American uses the volley and half-volley less freely than the Englishman ; he finds it safer to wait, although the volley or half-volley would often take the opponent by surprise. Almost every ball comes off the back-wall so easily that the risk does not seem worth while.

But the court and balls will not account for one marked feature of the American play, viz., that from the left-hand service court the backhand service is scarcely ever tried. In England it is very common, and its advantage not only in hiding the ball from the opponent, but also in making the ball come from a different point, is fully realized. Mr. Dames Longworth even serves back-handed from the right-hand side, and this attack is wonderfully effective.

There can be no doubt that, in other respects besides this, the standard of excellence in America is many points below the standard of excellence in England. This is due not merely to the larger number of courts, professionals, players, and competitions, but also to the comparative absence of the "preparatory" games for rackets, and especially of squash, in America, and also to the fact that American players seldom begin rackets till they have ceased to be boys. The great English racquet families, e. g., of the Crawleys, the Fosters, began ball and games when they were quite little boys.

But America is ahead of England in energy. Those who do play the game over here play it with heart and soul ; the average is already high, and seems likely to rise quickly every year.

At the public schools and at Oxford and Cambridge the game has languished somewhat of late years, partly because there are not so many who can afford the expense. Here there is no such reason, and so there is every promise of a great and rapid rise in the American standard of excellence.

There are certain suggestions which I should like to make about the way in which this rise may be hastened.

There should certainly be more courts in this country. It surprises me that every great university and every great school has not yet built its court or courts, with squash-courts by the side. Winter exercise is a serious problem for the schools and universities here, and mere gymnastics or mere athletic sports

will never alone be the final solution of the problem. There are needed not mere exercises, but games, and of all games racquets and squash are among the most suitable.

I would suggest, therefore, that all the great universities and schools should have racquet and squash courts built for them, either from their own funds or by the generosity of such patrons of true sport as those who subscribed to the Tuxedo tennis and racquet courts. Many of these had never even seen a tennis court before! If the authorities have any scruples, I can assure them, as one who has been a master at Rugby and at Marlborough, and a lecturer and coach at Cambridge, that there are few, if any, games which are more played by those who work hard and successfully with their brains.

I should suggest, also, that squash be learned before rackets be attempted. In squash it is far easier to reach the standard at which one can enjoy one's self, and the squash court is a great nursery for racket players, as Harrow School has often proved.

With regard to the game itself, I hardly like to advise the use of faster courts or harder balls, at any rate for nine players out of every ten; nor should I like to suggest a very liberal use of the volley and half-volley. But I might safely recommend American amateurs to vary their service; e. g., its pace and its cut, far more than they do at present.

In considering some of the differences between American and English (court) tennis, we shall find that they also depend partly on the differences in the balls and in the courts.

The American balls, and especially the Boston balls, are somewhat harder than the English, and the cloth is somewhat thicker. The problem of the best possible ball cannot be entered into here; but I think it may safely be said that the average American ball lasts longer and keeps its shape better than the average English ball.

The American courts, at least those at New York, Boston, and Newport, are somewhat smaller than the best English courts (e. g., those at Queen's, Prince's and Lord's), and the roof is somewhat lower, partly owing to the requirements of the law about the height of buildings. In both these respects Tuxedo is an exception; it is of

the size of the Court at Lord's, where the Gold Prize is played, and has a very high roof. It also has perfectly true and uniform walls and floor.

The American courts are far fewer in number, and therefore there are, as in racquets, fewer professionals, fewer players, and fewer chances of variety of play.

When we come to consider the style of play, as distinct from the balls and the court, we are met at the outset by two great difficulties.

The first question is "What shall we call the typical English style of play?" Now I will at once leave myself out of the discussion, for I am not in the least a typical English player; the *English Times* is perpetually abusing my methods, as being "boisterous" and "rollicking," and far removed from the style of Alfred Lyttelton. Nor can Sir Edward Grey be considered as typical; his methods are very like my own, for he relies



By courtesy of "Harper's Weekly."

QUINCY A. SHAW, JR.,
EX-AMATEUR RACKET CHAMPION.



F. F. ROLLAND,
CANADIAN AMATEUR CHAMPION, 1899.

chiefly on his activity and on his return. Nor can Ernest Crawley be considered as typical; his stroke is almost entirely with the wrist, and utterly unlike the stroke of any other player. Peter Latham is not a typical English player either—he is quite unique, in fact, almost as unique as Tom Pettitt.

It is probable that either Mr. J. B. Gribble or Mr. Percy Ashworth would be selected as the best example of the best English game. And I shall take them as my examples, at the same time trying to allow for the fact that they are far above the average.

The second question is "What shall we call the typical American style of play?" For if, on the one hand, we take the New York Racquet and Tennis Club, we shall find that the style is almost English. If Mr. Gribble played there the members might regard him as one of themselves if they left out of sight the standard of his play and his method of volleying and serving on certain occasions. Mr. Cecil Baring and

Mr. Gribble play in almost precisely the same fashion. Mr. T. Suffern Tailor's hard, straight forces, and E. Thomson's overhand "railroad" services, however, would be seldom seen in England. For them we should rather go to Boston.

In Boston we find the hard, straight forces, for which Pettitt is famous, and often the overhand railroad service, of which Mr. Lawrence Stockton is far the greatest exponent. The *English Field* of February 10th says:

"Stockton is a player who relies almost entirely on his service (which aims at drawing the opponent right up to the net and close to the side-wall, rather than at making a nick), and on his wrist-flick. He uses his body and shoulder very little, but (in the rallies) rather tries to force straight and hard, or to get the nick. He does not put on very much cut."

Most of the Boston players serve hard, hit hard and aim for the openings or for the nick, keep the head of the racket down, use their wrists and arms well, mask the direction of their strokes, and play with wonderful energy and activity. They do not use the side-walls very much, nor do they put on a heavy cut, as a general rule, though they occasionally put on a twist. In Boston, however, there are one or two exceptions. Thus a great deal of the game of Mr. Richmond Fearing, and the whole game of Mr. Austin Potter, is English rather than Bostonian.

If, therefore, we wish to make comparisons, we compare England and New York, where the teaching of Alfred Tompkins prevails; and we shall add that, both in New York and Boston, as in England, the rackets are far more tightly strung, the courts are far truer and faster, and therefore the game is faster, than in former days. In New York and Boston, as in England, there is less grace and dignity, more activity and exercise. In New York and Boston, as in England, the standard of honor and courtesy is—generally speaking—just as high as it can be.

But in England we find more volleying and half-volleying, more play for the grille, and more side-wall play ("boasting") than in New York. These are the chief contrasts.

The contrasts are far more numerous between England and Boston, and it might be interesting if I frankly mentioned just what struck me most the

first time I went into the Boston court.

Needless to say, the idea of a court on the fifth or sixth floor was very strange to me ; the mere possibility of such an ingenious scheme would not have occurred to an English mind.

I was also struck by the very high average of play, or rather by the appearance of a very high average. I went into the dedans again and again, and I cannot recall a single instance where both players did not seem to be enjoying themselves, bustling about, getting up all sorts of returns, and "putting up" a game that was not always graceful, perhaps, but was seldom dull. The very trousers, tucked into the socks to prevent a ball from hitting them, etc., were a sign that the players set "business" above any merely æsthetic considerations. The marker called out the score with great keenness, as if he were saying, "This is *the* game of the whole year." There was no sign of slackness on the part of markers or players. There was a keen desire to win, and to win fairly. After the game there was often a most elaborate discussion of the play. There were more spectators than would have been pres-

ent in England, in spite of the fact that America has fewer "men of leisure" than England has.

It will be most interesting to see to what extent Tuxedo, with its fast court and splendid opportunities, and with its promising marker, Ted Johnson, will develop a style of play different from, or akin to, that of England, New York or Boston, or a mixture of the three.

There is no space to mention many of the other differences : for example, that the English players in a four-handed game often both stand back, whereas one American player usually stands forward. I can only briefly sum up a few of the points which seem best worth emphasizing :

First of all, in spite of the fact that Americans begin the game of tennis comparatively late in life, that they have fewer courts and markers and players, that they have fewer squash-courts, that they have fewer men of leisure than we have in England, yet I really think that they play with more energy, that they are more ready to try new ideas, and that they have reached a higher *average* standard of play than we have reached in England.



A FOUR-HANDED GAME.

Secondly, the American game is not yet fully developed. It is not every player, of course, who will find it worth while to try to use the volley, the half-volley, the heavily cut side-wall service, and the boasted force, to the same extent that Peter Latham uses them. But



THE NEW YORK "CORRECT" TENNIS STROKE, WITH HEAD OF RACKET ABOVE LEVEL OF WRIST; THE BOSTON STROKE HAS THE HEAD BELOW LEVEL OF WRIST.

there are many who will find the experiments well worth making, and who will therefore make them.

Thirdly, Americans are sure to realize soon the inestimable value of squash and rackets as a preparation for court-tennis; and, when once they have real-

ized the great value of these other games as winter games, especially for those who are compelled to work hard, then we shall see squash, rackets, and court-tennis courts built at every great American university, and, at any rate, squash and racket-courts at every great American school.

Last of all, when this desirable end has been attained, partly through the well-known open-mindedness of the college and school authorities, partly through the equally well-known generosity and true love of sport of such Americans as gave eighty thousand dollars for the Tuxedo tennis and racket courts, then we shall have not only inter-club, inter-school, and inter-university competitions, but also international competitions, which will probably do more to make the great nations understand and respect one another than any other influence in the world. For in these games, both in England and in America, players rarely forget that they are gentlemen; in contrast with commercial and many other kinds of competitions, the unwritten laws of honor are very strictly observed. It is this that sets these games so high in the list of games and athletics; it is this in which the two countries show not the slightest contrast.



THE TENNIS COURT OF THE NEW YORK RACQUET AND TENNIS CLUB.

AMERICAN AND ENGLISH DOG SHOWS CONTRASTED.

By L. P. C. Astley,

Judge at the Westminster Kennel Club's 1900 Show.



MADISON SQUARE GARDEN, NEW YORK, FEBRUARY, 1900.

COMPARISONS are not necessarily odious, the proverb to the contrary notwithstanding ; at any rate I will steer clear of the adage, so that my knowledge of dog politics on both sides of the Atlantic may be of interest to all and benefit to some of the readers of OUTING.

It will, perhaps, be best to divide what I have to say into heads, and without further preface I will begin with "The Management."

I consider, taking the important items of the number as well as the quality of the exhibits, which are the two greatest factors in determining the status of a show, that the grand exhibition held February 20th to 23d at Madison Square, New York, will compare favorably with Crystal Palace, Liverpool, Manchester or Cruft's. These may be accepted as being the best English fixtures. As regards others, such as Birmingham, Bristol, Derby, Leicester or Cheltenham; New York unquestionably takes higher rank.

The Crystal Palace, however, is the English show "par excellence;" its

numerical strength may not be as great as Cruft's with all its "catchy" classifications and the numerous baits held out to exhibitors by one of the "cutest" caterers in the dog world, but for solid merit, for good all-round excellence in management, and the expedition with which the heavy task of judging is run through, it has no parallel in the world.

This question of expedition is to my mind a most important one, and I cannot but feel that the Westminster Kennel Club show would be considerably improved if the judging was accomplished on the first day of the show. I have a reputation for being "quick" at sorting out the classes, and have frequently judged three hundred dogs of all breeds in three and a half hours. The judging could be done equally readily in America if the dogs were put before the judge in a sufficiently expeditious manner.

The reason for the unwarrantable delay is the fact that the majority of the stewards either do not do their work, or do not understand what their duties are. In England the arrangements are



PRINCE NAPOLEON (FIRST, OPEN AND WINNERS,
SMOOTH COATS).

as follows: One steward is appointed to mark up the awards and take charge of the slips, and generally to answer any questions put to him by the judge as to the age, etc., of the exhibits. Another steward checks off the dogs as they enter the ring, and three and sometimes four other stewards see that the keepers take each dog off its bench and into the ring, and in many cases the stewards take them in themselves.

This is very different to the American procedure, where one steward not only attends to the judge, but sends for the dogs, chalks up the awards, in fact, does all the work, except fetching the dogs from their benches, which important duty is delegated to keepers, who often know little or nothing, and care less, about their duties.

Another pregnant cause of delay is the fact that the competitors for the various special prizes are not notified in any way to the judge, who has to find out, as best he can, which dogs to select for the competitions. The remedy for this cause of delay is simple. No dog should be able to compete for a special who is not duly entered for it, and the fact specified upon his entry form. I think it very possible that this reform will be made another year by the Westminster Kennel Club.

The remedy for the lack of experienced stewards should be met by the officials of the many specialist clubs volunteering their services as stewards for their particular breeds. A steward's badge should not be looked upon as an ornament and a distinction, but should be an indication that its wearer is "out on business," and not on pleasure bent. Furthermore, it should be a sure sign that he will do any little service, answer any question, or give any directions in his power to the inquirer, be he judge, exhibitor or sightseer.

I certainly think that the Dog Show movement would benefit much if such reforms as are foreshadowed above were instituted. I see no reason why an exhibitor should have to be away from home and business for a whole week to attend a show. In England, on the evening of the second day of the show, the great majority of exhibitors are at home. There is a general exodus as soon as the judging is over, and the saving in hotel dues and out-of-pocket expenses is considerable.

I have no doubt some of my readers will consider some of my suggestions superfluous, but they are written with an object, viz., to do away with those long, tedious hours in the ring when neither



BLACK PETER (FIRST, OPEN AND WINNERS).

judges, officials nor dogs can do their best.

Whilst I am on the topic of management, and dealing with comparison, I cannot omit to make one, at least. I know some good secretaries and managers, but I know none more competent than Mr. James Mortimer.

Perhaps it is outside the scope of this article to mention so purely a financial matter as the price of admission. Yet the sum of one dollar seems to me very likely to keep away from the show a class of persons whom in England we find its best patrons, namely, the "workingman fancier," who is the very life and mainstay of the English dog show movement, but in America he is conspicuous by his absence.

More breeders are evidently needed, and to encourage the smaller fancier an admittance should be charged within his reasonable reach; at least that is my opinion, borne out by the great success of nearly the whole of the five hundred shows held each year in Great Britain.

So much for management. As for the dogs themselves, I will now endeavor to draw a series of parallels between the various breeds at the four most eminent English shows and the Westminster Kennel Club Show of 1900.

It will probably be best to take them in the catalogue order.

St. Bernards come first in the list, and my patriotism recoils when I have to state that at no show in England held of late have I seen such a good display of the "Holy Breed" as that I had the pleasure of looking over in New York. In England one big kennel and one or two smaller ones annex all the best prizes in this variety. Consequently, the breed has declined in popularity. It is probable that "The King's Son," who belongs to the big kennel indicated above, is a great many points better than anything at the Garden, but in comparison with anything outside this kennel, such dogs as Sir Waldorf, Prince Napoleon, and such bitches as Princess

Alice and Lady Bryn Mawr, would hold their own in any English competition.

Mastiffs were not as good as they are in England. Both Prince of Wales and Black Peter are good specimens, but the latter begins to show age.

Great Danes not being handicapped as they are on the other side by the odious cropping regulations, are here certainly far superior to the English group at any show. Taking the Palace as the best display of the variety, although we have at least one very good dog, in bitches we should lose all along the line. I was struck very much with this group and especially with Sandor Vom Inn and Montebello Perle. The turnout was



MONTEBELLO PERLE (FIRST, OPEN AND WINNERS).

wonderfully strong from all points of view, and we have seen nothing like it in England for a long time. I had no difficulty in following the awards, which were consistent throughout.

Bloodhounds are much behind England. The winner was just a fair dog; the rest failed lamentably. One recent importation, which has achieved quite a reputation in £10 selling classes, even in this poor company was by no means uniformly successful. Faustina I thought a good sort of brood bitch.

Although the classes of Borzois contained some fairly good specimens, they were by no means a brilliant lot, and in the Duchess of Newcastle's kennels



CHAMPION LAD OF KENT (FIRST, OPEN AND WINNERS HEAVY-WEIGHT).

alone could be found better than were here in the whole show. All the English shows I have selected as representative have better dogs and bigger entries than here.

The same remark also applies to Deerhounds; want of size and texture of coat and ragged condition seem to be the prevailing faults of this beautiful variety here.

There were some very fair Greyhounds. At the Palace or Cruft's there certainly would be better quality and probably greater numbers with a similar classification, and at all the four English shows more quality would certainly be present.

Pointers just now in England are under what I hope is but a temporary cloud, and after careful consideration I have come to the conclusion that although we have a few better dogs than those seen in New York, the classes, taking numbers and quality into con-



WESTLAKE'S STARTLE (FIRST, OPEN LIGHT-WEIGHT).

sideration, are better in America than on the other side. I noticed some very good youngsters in the novice and puppy classes, and the numbers present, which included Champion Lad of Kent and Westlake's Startle, certainly left nothing to be desired. The Palace and Birmingham shows are the best for this variety in England.

I find upon careful comparison that in numbers America certainly stands ahead of the Old Country as far as Setters of all varieties are concerned, except the Irish; but in quality of head, outline and general setter character, Old England still holds the lead. There were, however, at the Garden show, certainly most meritorious specimens in all the classes, including Cincinnatus Pride and Selkirk Freda, and I could follow the judge pretty closely in his awards.

I was much surprised to find that



CHAMPION CINCINNATUS PRIDE (FIRST, OPEN AND WINNERS).

there were so few Retrievers present, and none of the curly variety at all; surely there is room for these dogs. The breed is a most picturesque and companionable one to own.

The Sporting Spaniels present, both in quality and numbers, certainly were far below the English shows in all particulars. There were no long, low, flat-coated ones in the classes. But in the Cocker classes America had her revenge. At no show in England could anything like the numbers present at Madison Square be approached, and in quality, too, I fear we should also be found sadly deficient. It is some considerable amount of comfort to me, however, to note that that nice bitch, Braeside Betty, could win here, proving at least that we English have some good ones left. I thought

the reds very handsome, and the broken colors in which Romany Rye was shown, also have a fascination all their own, but I must refer to the bad condition of many of the coats of even the winners, which showed a lack of attention.

In contrasting the Collies at New York, which included J. Pierpont Morgan's Ornament and Brandane Alton Monty, with those at the Crystal Palace, Liverpool, Manchester or Cruft's, I have an easy task. American buyers have been very liberal in putting down their dollars for English winners, but I do not think that intelligent breeding operations have been carried out. To buy a good dog, and mate him to a good bitch, is not, as many have found to their cost, the "royal road" to success; it is "quality" blood that America wants now. Size and coat, with their almost invariable attendant coarseness, she has in plenty; it is quite possible by careful selection to buy the one thing needed even yet. But care must be taken in mating, or the collies of America, imbued as they are with "coarse" blood, will not easily get on an equal footing with the dogs in the old country. At Liverpool, in January, there was a grand turnout of this breed, and the phenomenal youngster, Parbold Piccoli, could easily beat anything over here, as also could Mr. Stretch's beautiful young bitch, both, by the way, *débutantes* upon this occasion. The classes at the Westminster Kennel Club show were fairly good in numbers, however, a redeeming point, inasmuch as it indicates there are plenty of breeders, even if they are not going in the right lines.

Smooth collies, Bob-tails and Dalmatians, all languish in the desert of unpopularity, yet these are sterling good varieties with endless possibilities before them.

I fear that the Poodle at the Madison Square would fare but ill in competition against similar classes at Cruft's or the Palace, which are our best shows for this variety. The sight of such a



SELKIRK FREDA (FIRST, OPEN AND WINNERS).

grand specimen as Vladimir would paralyze the owners, say, of Carlo T. or Milo-fils, and there are numerous "curlies" in England better in all points than the winners in the classes devoted to this sub-variety here.

Bulldogs in America occupy a peculiar position, as outside recent importations there were very few benched. Glenwood Queen I thought a pretty bitch, decidedly weak in facial properties. True Type's advent over here was sensational, but she was never considered a "flyer." Baron de Merley is a sound, useful little dog, with a nearly perfect body and many other excellences, whom I thought somewhat hardly used. I suppose that four out of the five best bitches in the world were in the show for the first time on American soil. I refer to Homestead, Lady Dockleaf,



HEATHER MINT (THIRD, ROUGH OPEN).



BRANDANE ALTON MONTY (FIRST LIMIT).

Housewife, - Petramosse and Birkdale Beauty, of which quintet I prefer the last as a brood bitch, and as she is in whelp to that grand dog, Bromley Crib, permanent good should result to the breed in America from her litter.

Of course, in numbers and quality outside these bitches and those good dogs Katerfelto, and Persimmon, who is one of the best-headed "big ones" we had, the show would not compare with any of the four shows I selected; still, with this recently acquired material, I quite expect in a few years to see a wonderful improvement in this true old English variety in the land of the Stars and Stripes.

Coming to the Bull-terriers, I must without the slightest hesitation award the palm of excellence to America. At no show have I ever seen such a marvelous collection, and the all-round excellence was quite as apparent as



LAKEWOOD PRIM (SECOND, OPEN).

the quality. The youngsters, too, came up very strongly. Fire Chief is a sterling young dog. Mr. Dole had another good one, shown a bit under his weight, and there were some bitches of great merit. I was pleased to meet an old favorite in Modesty, fit and well.

The cropping regulations in England have certainly "killed" all the breeds affected, and the bull-terrier perhaps has suffered the most.

The Airedale terriers here were but a fair lot; Clonmel Marvel, although no flyer, still is ahead of the rest. This is a variety that deserves cultivation in America, as it is essentially the "one-dog man's" dog; a few judicious importations would greatly benefit the breed.

No show-goers could fail to be greatly interested in the Boston terriers. Upon my former visits to America I



BLUE BELLS II (FIRST, OPEN AND WINNERS).

noted these game and quaint looking "late additions" to the dog world. I notice on this trip a great improvement in shape, quality, head, points and color, and there certainly seems to be a big future before this breed of "America's own" creation.

The French bulldogs, thank goodness, we do not know as such in England. The bat ears of the specimens shown are an eye-sore to an admirer of the only bulldog (the British). In other points the specimens on view were coarse, and in some cases plain in face and without the "toy" quality of the best English specimens. As an exhibit they were interesting enough.

The Beagles were a grand group indeed, and certainly gave similar classes in England the "go-by." I was particularly struck with the great excellence of the Hempstead representatives, of which Primate is a good example; they have an evenness of type and a per-

fectness in shape and quality not often found. There were probably half a dozen dogs and the like number of bitches in the show that could win in England; and I only know of one beagle dog, Perongate Rattler, and a brace of bitches in Coquette and Bangle, that could in any way hold their own over here.

I hardly know how to compare the Dachshunds of the two hemispheres. Here the German type is in favor; in England the improved type is "O. K." I prefer the English edition, of course, though I must say that even at Continental shows I have not seen nicer specimens than the black-and-tan dog and the bitch of the same colors that won the principal prizes. They are a brace of very neat and good all-round puppies.

Before sailing for America I had the honor to judge at the Liverpool show the best classes of Fox terriers seen for



PRIMATE (FIRST, OPEN AND WINNERS).

a long time in England. I am, therefore, in a position to form an exceptionally sound opinion as to the merits of the superb collection I judged at the American show. Taking the junior classes to be the real representatives of progress, I am sure that the winners of either first or second in the puppy classes at Liverpool would not have been in the money at New York—that is, as far as the smooth section is concerned. That good terrier and stud dog, Veracity, is making his mark in the variety without doubt, and a trio of puppies by him, had they better legs and feet, would take a lot of stopping in any company. Those old and earnest breeders, the Messrs. Rutherford, happily won in dog puppies with a very nice youngster indeed. Of course, there were a lot of real bad ones forward, but not so



ROMANY RYE (FIRST, OPEN AND WINNERS, BROKEN COLORS COCKER).

many as I have seen, or even as I expected to see on this occasion.

The sensation of the show was the advent of Mr. R. F. Mayhew's Hands Up, certainly the best wire-hair youngster out for years, and certainly one of the best three of his variety. These, I take it, are at the moment Go-Bang, Barkby Ben and Hands Up. Whether Hands Up can beat his sire is an open question which did not lie in my power to solve, as Mr. Carnochan generously did not enter Go-Bang to give, as he says, "the 'young 'un' a chance." This is a most commendable and sportsman-like spirit on the part of the owner of the Cairnsmuir Kennels. Well, be it as it may, Hands Up never gave his opponents a "look in." He won easily, and certainly has a distinguished career before him on either side of the water. After him there was very little in the wire-hairs, and we could easily beat them in England.

The fact that Richmond Quantarn won in bitches, and she not in her best



FIRE CHIEF (FIRST, PUPPY, NOVICE AND LIMIT).



KATERFELTO (FIRST, OPEN, AND WINNERS,
OVER 45LBS.).

form either, clearly shows that there was not much quality present. Dogs over here are wretchedly shown; their coats are unkempt and neglected, and full of soft dead hair. I would respectfully request owners to examine the coat of Hands Up, which is absolutely perfection, and was at the time in grand condition.

The Irish terriers were certainly not on a par with similar classes at any decent show in England, and a long way behind those at the four named shows. Both the first and second in dogs were recent comers, and they held the rest very safely. Another recent importation, Endcliffe Surmounter, got complimentary cards only. I hear he has been judiciously boomed by the fancier press over here as a good one. I can only say, with due deference to these opinions, that I consider him a most moderate specimen. The bitches were but very moderate; the old faces,



GLENWOOD QUEEN (SECOND, OPEN, UNDER 40LBS.).

Red Gem and Lorton Belle, kept their places.

Scottish terriers were but a very moderate lot. The Newcastle Kennels showed some fair ones, certainly, who will look better in a few weeks' time, but these classes compared but ill with similar ones on the "other side."

Black-and-tan terriers were quite as good as I expected to find them. Here again the "cropping" has spoilt the breed in England. All the winners could about hold their own as far as quality is concerned at the four shows so often named.

Skyes and Bedlingtons are evidently not in favor here. Both are good breeds and deserve better recognition.

The Yorkshire terriers were good. Both first and second would be, if properly shown, able to do well in England.



MILO FILS (FIRST PUPPY, NOVICE, LIMIT AND OPEN).

That very nice dog, Merry Module, was so badly shown that he could not possibly do more than he did, as the winner was put down in wonderful form. This seems to be a popular breed in America, but not well understood by its admirers, as far as "show form" is concerned.

Toys of all kinds seem to be on the up line in New York. The Pugs were very fair, but the blacks want better faces. The numbers were but indifferent and England is well ahead, as is also the case in Pomeranians. This charming variety of toy is, however, looking up, and the new faces at this show should do permanent good.

In toy Spaniels there were some rare good specimens. Still, I do not think that as a group they can come anywhere near our English exhibitions. I am

glad to see that head points have been made a study, and some very decent specimens came before me.

There seems to be no other breed calling for comparison, and now I may dismiss the dogs *per se* and give a few final remarks upon the differences between the English and American exhibitor.

I hope I shall not be thought presumptuous or egotistical if I say at the start that in the essential properties that make a good exhibitor the Englishman scores over his American cousin in most cases. In England the "kicker" is practically unknown; if he is existent he keeps studiously quiet, because he knows he will be promptly "sat upon" if he breaks out. In America he is certainly tolerated, if not encouraged. Everyone seems to be afraid of him, and what in England would be considered a gross breach of etiquette and fancier-



THORNFIELD KNOCKOUT (SECOND, OPEN WIRE-HAIR).

assure Americans that these men say and do more here than they would ever think of doing or saying in the Old Country. Indeed, the Kennel Club has a rule bearing on this point and penalties that prevent unpleasant scenes effectually.

I am not calling attention to this matter because there was any appreciable amount of "kicking" done at the recent New York show; on the contrary, everything passed off very pleasantly, but I did hear remarks that I thought not right, proper, gentlemanly or sportsmanlike, though with gratification I confess in a less degree than in former years.

As this is the only opportunity I shall have to directly express my sentiments to the American kennel world, I wish to express gratitude for the kind hospitality and cordial good-fellowship given me on this, my third visit to the United States.



HANDS UP (FIRST, NOVICE, LIMIT OPEN AND WINNERS).



GO BANG (NOT SHOWN FOR COMPETITION).

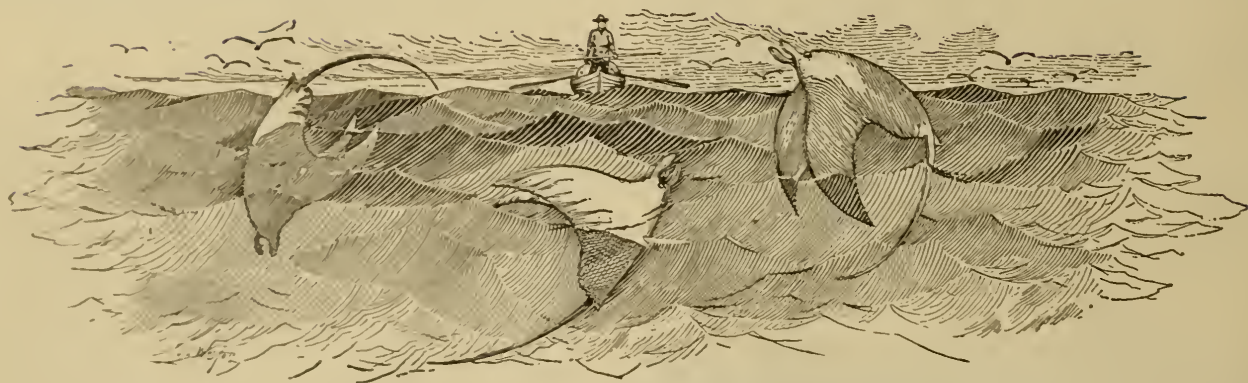
like feeling, is here passed over as an attendant evil, incidental to a dog show.

The "kicker" really has no grievance. If he does not like a judge he has the remedy in his own hands. An award is only one man's opinion. Whether it is a good or a bad one has nothing to do with anyone but the man who accepts the office of judge and the committee who selects him. If this opinion is opposite to an owner's, he has only to take his defeat like a sportsman, and not show again under the judge, whose appointment and competency he has indorsed by his entry.

There are a few Englishmen here who set an example to be deplored in this direction, and I write these lines to

TRAILING THE SEA-BAT.

By Charles Frederick Holder, LL.D.



FLASHING AND SOMERSAULTING IN A CIRCLE.

THE outer Florida reef, where the army of coral polyps has made its last stand against the Gulf Stream, was lying on the surface of what seemed a sea of molten steel. The wind was dead, and the blue expanse of the gulf had that strange oily appearance so often a characteristic of a dead calm in the tropics. In the west vermilion-tipped clouds—mountains of the air—rose high in the heavens, casting deep shadows over the green-topped creations of the wind, hurricane, or the prevailing tides. The keys appeared to be formed without rhyme or reason, but in reality nature could not have ordered better, as with their outlying banks and reefs they constitute a perfect harbor, a deep blue channel winding clear and distinct against the coral-covered lagoon, completely encircling Garden Key, the headquarters of hunters, sportsmen and anglers who find their way to the outer reef in search of adventure.

Some wit has described fishing in Florida in the summer as sitting in a Turkish bath holding a string, and I think the author of this mot found his inspiration on the reef on a warm day while trailing the sea-bat.

The heat was appalling, pouring down with such intensity that the shallows

were too hot for comfort, and thick vaporous clouds waved upward from the bleaching coral sand, distorting every object along shore. For days the dead calm had continued; the long sleepy summer was at its height, and one had to pick his time for sport and diversion. There was an hour or two at sunrise for barracuda spearing, or for the beating jacks; a long siesta at midday, then a while toward evening perhaps when one could lure the dainty gray snapper or test conclusions with the big sharks which swam the blue channel at all times. Then came the night, often cool, to be spent on the water listening to the melody of negro rowers, the weird tales of Chief, a Seminole, who preferred the heat of the outer reef to the mosquitoes of the coast.

On such a night, when the only sound to break the stillness was the distant roar of the surf, there came out of the darkness, near at hand, a rushing, swishing noise; then a clap as of thunder, which seemed to go roaring and reverberating away over the reef, like the discharge of cannon. So startling was the sound, so peculiar, that the negroes stopped rowing, and one or two dropped their oars in consternation.

"Vampa fish, sah," said Paublo, the

stroke oar, in a hushed tone, "an he mighty uncomfortable near, sah—jes over yander."

I thought so myself as the eight-oared barge now rocked in the sea made by the fish. In a few moments another jumped some distance away, and we could hear a splashing sound, which Paublo said was caused by the fins as the fish rushed through the water. The darkness was of that quality that could be felt, yet it was that described by Milton as

"Dark with expressive bright"

as the lagoon scintillated with phosphorescent light; every oar set the sea ablaze with silvery radiance, and ahead of the boat waves of fire seemed to gorippling away. Now another seething, hissing sound was heard, and a blaze of triangular light above some huge, dim fire body below, glided swiftly along; then a volcano seemed to rend the very sea, and out of a blaze of phosphorescent light that sent its radiations in every direction, rose a

dim shape, cleaving the air to drop into another volcano, which opened to receive it with loud intonation.

"Sea Vampa, sure," Paublo whispered, as though he feared that the unknown would hear him. "Dey jes wheelin' an' wheelin', leapin', an' I reckon we'se in a bad place."

"Sea bat," grunted Chief, as the ladies expressed alarm. "They jump five, yes, eight feet high."

"How heavy are they?" I asked, thinking of possibilities.

"Three or four tons," replied Chief, sententiously.

This answer was unsatisfactory to some of the party, so we hauled close in shore near Long Key, where we listened to the explosions, as they seemed to be nothing else, caused by the crash of the return of the leaping fish. A school of sea vampires, sea bats, or devil fish, as men call them, had wandered into the lagoon. I knew them by reputation and hearsay, but never had seen one alive; and when I announced that I was going to take one on the following day, if they were still there, the boys, as the negroes were called, all protested.

"Why, mars-ter, one of dem vamps yander is twenty feet wide, 'deed he is. Five years ago a schooner seventy-ton burden, was layin' jes offen de pint yander; de capten had dun done gone ashore an' all de crew ceptin' de cook was a pickin' micramocs on de reef, jes ober yander wha yo' see de ole wrack a-lay-in', yes sah, jes yander under de cross. All

at once dey hear de cook a-hailin' an' screamin' jes lak he crazy, an' lookin' up dere was de schooner, sails furled, anchor down, a-sailin'outen de channel. De cook he ran 'bout lak he crazy; he don' want to jump overboard cause he fraid of de sharks, so he jes yelled; an' de schooner sail on for half a mile, den stop, an' de men what had been fol-lerin', clim board. What done it? Why, de vampa fish. Yes, sah, he jes pick up de anchor an' tote it off."

Each boy had some particular story



IT APPEARED TO FLY INTO THE AIR.

to relate as to the dangerous character of the fish and its gigantic size and strength, intended to convince the listener that its capture was impossible. I found that some of these stories were true. A sea bat had towed a schooner up the channel, and while several attempts had been made to take one of these fish, it had never been accomplished in this locality. When I asked for a volunteer, after announcing my intention of trying this sport, the men were strangely silent. There was a superstition among them, that the fish had some demoniac power; that it could seize a man in its claspers and hold him beneath its cloak-like body and smother him. I finally secured the services of Chief and Paublo, and by daylight the following morning we were on the water, the men pulling across the channel to the long lagoon which formed the breakwater of the group to the east.

My boat was a light cedar affair, built in Boston, thoroughly seaworthy and prepared for the rough weather that is often experienced among the keys, by having under her forward and side decks rows of airtight cans, which more than once had proved to be of good service.

For weapons of offense I had the ordinary grains of the reef with which I had often taken large fishes. This harpoon consisted of a two-pronged spear attached to a steel cap which fitted closely upon a long, pliable yellow pine handle. The barbs of the points were movable; when they entered a fish they closed, but when the slightest strain came they opened and prevented the harpoon from tearing out. A stout line or rope was made fast to the grains and led up the pole, and three hundred feet of it coiled forward in a large half barrel. Besides this I had a sharp coral chisel to use as a lance in case of necessity. Thus equipped, we were ready for almost any game, at least of the sea.

The early mornings were usually ushered in by transformation scenes of splendid possibilities—staged in the heavens—and this was no exception. Long before the sun appeared, the east was a mass of crimson clouds; first deep, dark and ominous, gradually increasing in brilliancy, color and tint, until the sun burst forth in all his splendor.

We soon reached the spot where we had heard the thundering of the sea bat the preceding night, but the lagoon

was apparently deserted. At Chief suggesting that the fish did not come so far up until full flood tide, we turned and rowed to the south, parallel to the great fringing reef against whose sunken coral rocks the surf broke sullenly. Long Key—a sandy spit since destroyed by a hurricane—Bush Key and the long fringing reef two or three miles in length, formed three sides of the lagoon, which at high water was from ten to twenty feet in depth and through a part of which ran a deep blue channel. Acres were covered with branch coral, while the rest of the bottom was either white sand, or had a scant growth of algæ—the home of craw fish, crabs and various shell fish upon which I believed the big rays fed.

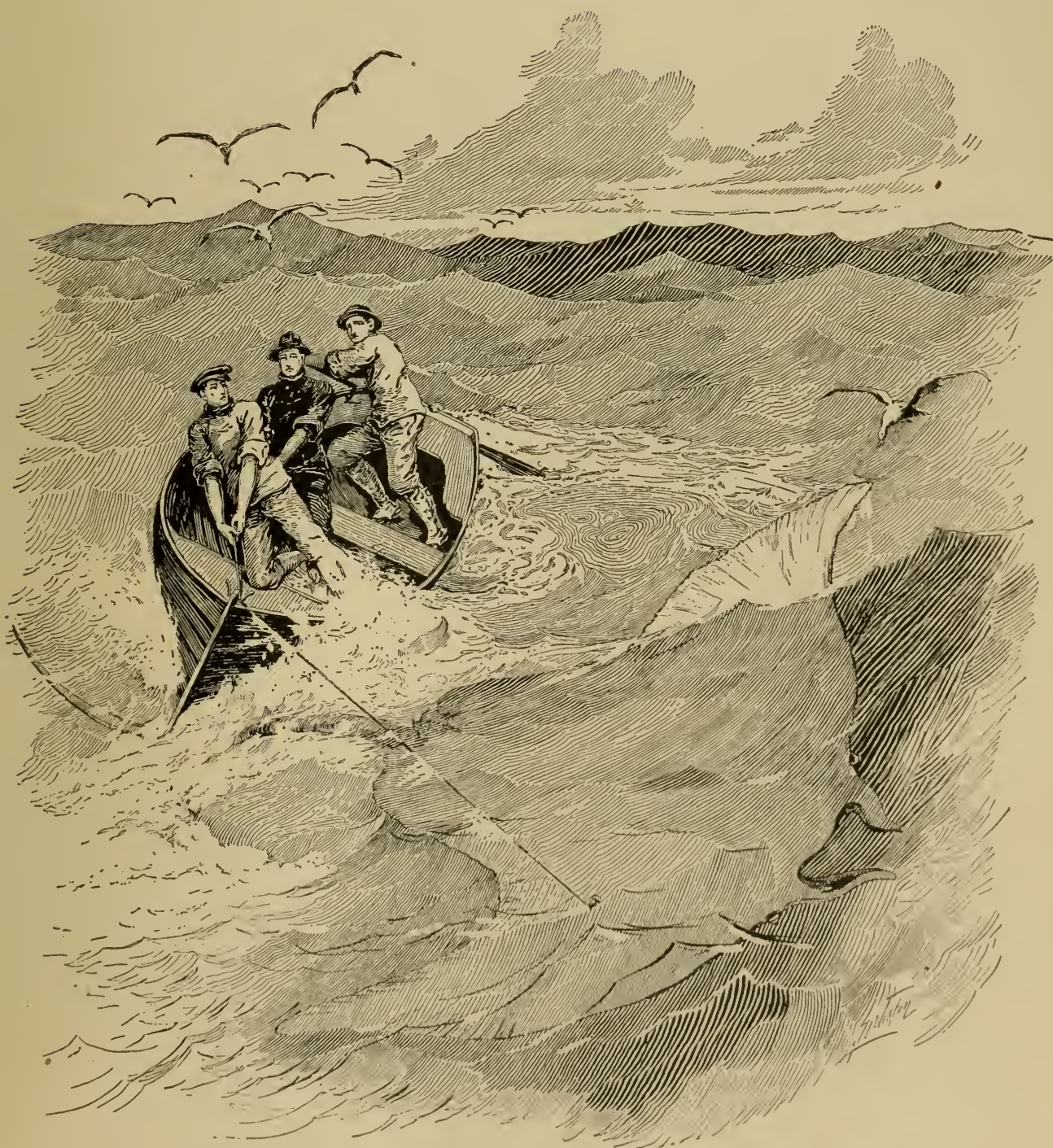
The men rowed slowly down the reef by an old ship blown in by a hurricane years before, now lying ghostly and still, with a corporal's guard of pelicans, frigate birds and gulls; down by Bird Key whose population of terns rose high in air with bewildering cries. I had begun to think that the morning was a poor time for vampire fishing when Chief stopped rowing and pointed to the east. I turned in time to see a black triangular object waved above the surface; it might have been the dorsal fin of a shark, yet no shark had so black a top-gallant sail, or, indeed, so large a one. Paublo was gazing at it with protruding eyes and parted lips; it was a rude awakening for him as I believe he had considered it a forlorn hope, and secretly prayed that we might not see the dreaded fish. I turned the boat in the direction of the fin and bade the men give way. The trim cutter shot through the still water like a gull. Where I had sighted the fish the lagoon began to dip into the deep channel of the Gulf Stream as it flows between Cuba and the Keys, and until nearly one hundred feet is reached every object on the bottom can be seen, so clear is the water.

We had almost reached the spot when not one, but five or six fins appeared, my exclamation causing the men to look around. I gave the tiller to Paublo, Chief taking the oars, and crept forward. As I picked up the grains I noted that I could see the bottom distinctly thirty-five feet below. We had happened upon a school of the monsters which were indulging in some game of the sea. There were, perhaps, ten or

twelve in all, moving in a circle one hundred and fifty feet in diameter, and churning the water into a veritable maelstrom. Chief was slowly and noiselessly propelling the boat ahead, and we drifted about thirty feet from the circumference of the circle.

Surely these fleeting, glistening figures were the witches of the world of fishes, as no more diabolical creature could be imagined. They resembled enormous bats, and in following one another around

the circle, raised the inner tip of the long wing-like fin high out of the water in a graceful curve, the other being deeply submerged. Imagine a fish shaped like a bat, the wings ending in graceful points, a vivid black on the upper surface and white beneath, a long whip-like tail, while from near the large and prominent eyes extended forward a pair of writhing, clasping finger-like tentacles three feet in length. Endow such a creature with marvellous activity



"WE WERE UNDER WAY DRIVING THE FISH WITH A SINGLE REIN."

and a constant desire to change its position and assume some extraordinary attitude, and possibly a faint conception of the actual appearance and personality of these strange creatures circling before me may be obtained.

As we slowly drifted nearer I could see them deep in the water, apparently going through a series of fantastic figures; now gliding down with flying motion of the wings; sweeping, gyrating upward with a twisting vertical motion marvellous in its perfect grace; now they flashed white, again black, so that one would have said they were rolling over and over, turning somersaults, were it possible for so large a fish to accomplish the feat. Since then I have been informed by one who had opportunity to watch them on many occasions, that this is what they were doing, and is really a common practice of the big rays. As I recall this strange performance, the huge creatures would suddenly turn over and shoot along upon their backs, thus displaying the pure white of the ventral surface, then again turning at the surface, move along with the remarkable, undulatory, bird-like motion. All this passed in rapid review, and fearing that they would become alarmed I gave the word, and Chief moved ahead.

I wished to select my game and make the throw as the fish turned, and to accomplish this I waited until several had passed. Finally we drifted directly in the path of the remarkable procession, the fishes paying no attention to the boat. One dived beneath her, another came careening up from below, standing directly on edge, as nearly as I could determine, and fairly exposed its broad back, not ten feet away; and as it glistened in the sun I hurled the grains into it with all my strength. The pine handle seemed shot into the air as it rebounded, then we became witnesses to the extraordinary agility of this monster ray. It appeared to fly into the air, rising, an appalling mass of flesh, out of the seething waters, its side wings beating the heated air as it rose, then falling with a crash and the reverberating sound we had listened to the night before; fell as a square eighteen by ten feet and weighing tons might fall.

As the heavy waves from the impact struck the boat, I stumbled into the bottom, rolling out of the way of the

jumping line that was now hissing from the barrel. The fish, after its first leap, had headed directly to the South, or out to sea, and the line was rising upward in coils. The Indian oarsmen rowed the boat ahead to lessen the strain when it should come, but so furious was the rush that I decided to check the fish before the rope was exhausted, and taking a piece of sail-cloth I grasped a coil and held on.

The boat was well under way, but the shock was terrific. Arms and muscles snapped, and for a moment the rope smoked through the cloth; then Chief dropped his oars and took it, and we were under way driving the fish by a single rein. I had used the boat to capture man-eater sharks, and as a precautionary measure to prevent the line from getting over the side, had a deep notch cut in the bow, in which it rested. With no little difficulty we succeeded in lifting it in place, the bow of the boat at the water's edge riding a heavy sea, which rushed ahead of us as an advance guard. In a short time the fish towed us into deep water, and then surged downward, keeping near the bottom, and we were forced as far astern as possible to keep the bow from going under. I noticed that Chief had taken out a big sheath knife, which he habitually carried in a leather scabbard, and held it in his teeth—a significant movement that was not lost on Paublo, whose terrified glance shot from the fast-disappearing keys to the hissing line ahead and back again.

We were headed far out into the gulf, and for two miles the ray towed us at rapid pace. It was evident that if something was not done the line would have to be cut away or we would follow our wild steed indefinitely. I therefore directed the men to ship the oars and pull against it while I took a turn with the rope around the forward seat; but this powerful brake had no effect upon the fish. Then I determined to haul in and try to lance it. We were now a mile and a half, perhaps more, to the south of Bird Key in the open gulf and began to feel the long swell that ever rolled in from the west, while an ominous squall cloud as black as night, to the south dead ahead, did not add to the pleasures of the situation. The line was passed astern and we all "boused on," as Paublo expressed it; now gaining a foot, again

slipping back, hauling, straining every muscle, slowly but surely forcing the light boat upon the fish to the accompanying shouts of Paublo and Chief—"ah ho ah," "ah he ho," "all together now," "ah ho!" Then would come a rush; the line would smoke through our fingers for ten or twenty feet, and lying back until the flurry seemed to die away to haul again.

For some time we worked in this way, and I estimated that the fish was not more than twenty feet away, and had crawled out onto the little deck to peer down into the water, when the line rapidly rose, then turned so sharply to the left that I was nearly thrown overboard. The Seminole, who was in the stern, grasped an oar and aided in hauling the boat around; but she yawed and careened so that the water poured in; then the fish appeared at the surface forty feet away, its wing waving in the air like the black piratical flag it was, perhaps in derision, perhaps in defiance, then disappeared. The fish had turned the keeled boat in little more than its length and was now towing us directly back to the reef—a proceeding more than satisfactory as a storm was rapidly coming, and if caught we should have to cut away; so we sat with a turn of the line about the thwart on the alert for any move. Steam could hardly have towed us faster; we flew through the

water throwing clouds of spray over the deck, racing with flocks of gulls that eyed us curiously, plunging among schools of Portuguese men of war and velellas, and in a short time without incident entered the lagoon, where I decided to bring matters to a finish and cut away rather than go to sea a second time.

Whether the great fish was accustomed to go to a certain feeding ground and now returned in its terror from mere force of habit, I do not know, but the fact remains that it was rushing up the lagoon between the Long Key and the outer fringing reef, into an almost perfect *cul de sac*, the water shallowing at every flap of its wonderful wings. I stood on the little deck and could see every movement of the strange fish, that in swimming over the white sandy bottom in water not over four feet in depth displayed its outline perfectly.

Chief had the oar, steering the boat after the fish, which, it was expected, would turn at any moment, while Paublo, stood amidships holding the rope, which had a turn about the seat. The lagoon narrowed rapidly, and at high tide a small boat-channel was formed; at other times being too shallow and easily waded. Perchance the fish having passed this at flood tide, was again making for it, hoping to reach deep water, which was but a stone's throw away. The graceful,



"AGAIN AND AGAIN I LANCED THE FISH."

bird-like movements of its fins was a fascinating spectacle ; a waving, undulatory motion which sent the ray along at a remarkable speed, and the slightest increase of which forced it over the white sand like the shadow of a dark cloud.

We were running parallel to the beach, and some negroes stopped and waved their hats as we shot by. Suddenly, without the slightest warning, the fish turned. I saw the pointed fin leap into the air until it stood upright, as the fish seemed to breast the water in the turn. I stepped back and shouted a warning to Chief. But it was too late. The bow of the boat was jerked, shivering and trembling, almost completely around, throwing Paublo over the rail into the lagoon, and was away almost before he recovered his feet and stood in water nearly up to his armpits looking at the retreating boat doubtless with amazement seasoned with relief, as he could easily wade to Long Key.

The fish headed for the outer reef, on which a heavy sea was breaking ; drawing little or no water it could doubtless plunge over while the boat would either ground, or if it succeeded in making the reef, would doubtless be swamped in the surf. We took the line as Paublo dropped it, and surged upon it with all our strength, and were encouraged by finding that the fish was weakening. But we were rapidly approaching the reef ; another haul and we were nearly on top of our quarry, whose long tail was under the boat, the mighty wings pulsating just ahead. A patch of coral now loomed up, and this fortunate obstacle turned the fish and in the whirl the fin seemed to rise almost over the boat, hurling the spray over us, and once more we were off up the lagoon headed for the *cul de sac*.

I gave Chief the rope, and taking the big square-edged lance sent it into the black mass. A cloud of blood followed, while the speed of the fish was increased so that the bow was well under water, flush with the deck. Again and again I lanced the fish, but the blade was a chisel-like affair, and did not penetrate more than five or six inches. There was a duplicate pair of grains in the boat, and this weapon was also hurled into the ray's back, but still it rushed on, seemingly as vigorous as ever. I fully expected to see it turn again, but it held its course, heading directly for

the narrow tide channel between Long and Bush keys toward which Paublo was running along the beach of the former key. It was an exciting moment. The fish was alongside, yet we were going, as near as I could judge, at full speed.

Nearer we came, flying over the roots of mangroves, over patches of coral and sea-grass, into a narrow channel hardly four feet deep and not thirty feet wide, with a flat on each side partly bare. Not a tenth of a mile away the sea was beating on the reef, which meant liberty, if not life, to the fish. But fishermen's luck was ours. The tide was so low that it left but two feet in the upper head of the channel into which we ran. The fish discovered its error too late, but made a gamey attempt to rectify it, turning and lifting itself partly out of water, rolling the boat over, throwing oars, grains, and fishermen into the lagoon.

The turn cost the fish its life, as it ran high on to the narrow mud flat, where it beat the shallow water with its powerful wings, opened its cavernous mouth with great sucking gasps, every movement urging itself further out of its native element. Paublo, who had waded across the little channel in his exuberance, bounded on to the flat back of the monster and waved his hands aloft, while Chief ran in shore with the rope and presently had the fish securely fastened to a mangrove tree not fifty feet away.

We had earned our game and were well exhausted. Had it been high water, and could the ray have gone through the channel, which doubtless it often passed, it would have escaped.

Stretched upon the hot sands beneath the straggling mangroves, Paublo humming a low baccarole of his own invention, Chief silent, but with a long smile fixed upon his countenance, we could not believe but that the writhing black mass was a monstrous bird, one of the uncanny pterodactyls which geologists dream about; yet it was a noble quarry, "the struck eagle stretched upon the plain, no more through rolling clouds to soar again." The weight of the ray we could only conjecture, but it was doubtless several tons; and had this light and airy jumper sprang upon the boat it would have crushed it like paper.

When the tide was at the ebb the black vampire, as the men called it, was high

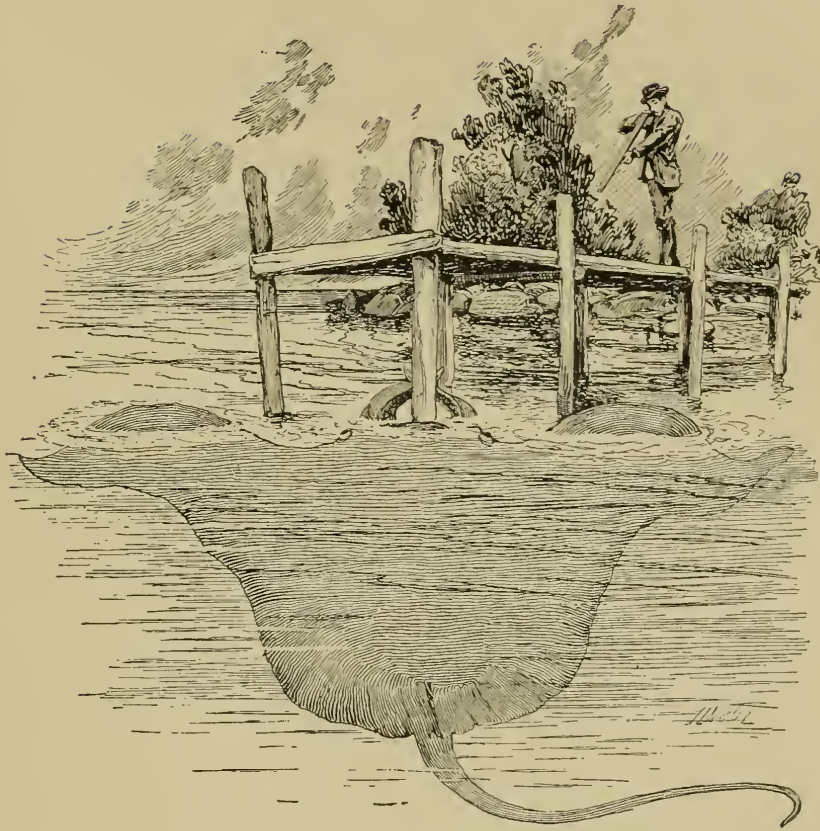
and dry, and was paced off. It was eighteen feet from tip to tip, ten feet long from its mouth to the base of its tail, which was about seven feet in length. It is impossible to convey any adequate idea of the appearance of this devil-fish, sea vampire, this *Manta brevirostra* of science, which is so difficult to take that it more often

runs away with boats than is captured, and of whose habits very little is known. Indeed, vampire fishing will never be a popular sport except among those who delight in an element of danger.

Mr. G. E. Northrop, of Chicago, captured a very large sea bat in the Gulf of Mexico in the Summer of 1898, and in a letter to the writer described it as remarkable sport. The fish gave a hard fight, towing the heavy boat a long distance. Unfortunately the photographs of this fish turned out unsatisfactorily. In this connection, it is a singular fact that none of the popular works of the day appear to have a thoroughly correct figure of the fish, nor are photographs of it available so far as I know.

The big ray was almost jet black upon its upper surface, the back being rough; the under surface was white, with gray cloud effects here and there, giving it a marbled appearance. Popular fancy has given the fish a sting above the base of the tail, but this is a misnomer; it is without the serrated lance which marks many of the tribe which I took in these waters, one of which wounded a companion by striking its lances across his foot.

The mouth of the ray as we pried it open was of ominous dimensions, and



THE SEA-BAT DRAWING PILES IN PORT ROYAL SOUND.

afforded ample room for a man to lie very snugly coiled up within. The teeth were very small, but the extraordinary feature of this fish—the one which has given rise to many tales, true and legendary—is its two tentacles or claspers, fleshy objects about four or five inches wide and three feet long, which extend outward from each side of

the mouth. Their office is undoubtedly to aid in securing food. When the fish is moving they are in constant motion, being whirled about like the tentacles of a squid, and that they are muscular and powerful has been demonstrated on many occasions. The natural movement of the claspers is inward, and when any object strikes between them it is instinctively held—a proceeding which explains the undoubted fact that these fishes can run away with large vessels.

At least five instances of this were heard of on the reef occurring from Tampa Bay to Garden Key, and the Hon. Wm. Elliott, formerly of Beaufort, S. C., a famous hunter of this game, reports two instances from that State. In every case the vessels, always at anchor, suddenly moved off in a mysterious manner and were towed greater or less distances. The ray had collided with the chain, and, true to its instincts, threw its two tentacular feelers or claspers around it and rushed ahead, thus lifting the anchor. That the claspers are very powerful is well shown by the experience of Mr. Elliott, who, in endeavoring to kill a large fish, which he had harpooned and run down, with a knife, felt his arm seized and held so

securely that it became numb. He called to the men to hold the fish at all hazards; but it is obvious that if the animal which they had just hauled to the boat had made a rush and broken the harpoon or rope the sportsman would have been carried off in its embrace.

I never heard of an attack being made by the bat on the Florida reef; there it was supposed to catch cray-fish, and employ the feelers to whip the food into its mouth.

That so enormous an animal can leap so easily and so high is remarkable, and I believe that this is a common pastime, as in later attempts to follow the fishes at night, I frequently heard the resounding crash that told of the return. The ray which I struck seemed to clear the water three feet, but Chief said that he had seen them jump five feet, while Mr. Elliott, already quoted, states that he has seen them bound ten feet into the air.

On the reef this fish was considered a dangerous animal, and never followed. Some years previous an attempt had been made to catch one which fouled a vessel's cable. The fish became impaled on the anchor, and when brought up broke away. It was then harpooned, but escaped after leaping partly on the boat, breaking the oars on one side, and seriously injuring the crew, who were crushed into the sinking craft. So the sea vampire, which was supposed to suffocate its victims with its cloak-like wings, was dreaded, and that anyone should consider it sport to follow such a creature and hunt it down was more than the ordinary reef negro could understand.

The negroes of upper Florida, Georgia, and the Carolinas, where the fish is also found, are equally afraid of it; yet, in 1845, to take one of these monsters was considered in these States the highest phase of sport, and the visitor to any of the hospitable plantations near Hilton Head would be sure to be invited to a sea vampire or devil-fish hunt. The sport was followed with great abandon, and one gentleman had a record of sixteen sea vampires taken with the harpoon in one season, the fish towing him from ten to twenty miles, and fighting from one to five hours.

The waters of Port Royal Sound were the breeding grounds of the fish, and it is a singular fact that the wild excite-

ment embodied in the sport was discovered in an attempt at retaliation on the part of the planters whose property had been destroyed by the rays. Those whose property abutted the Sound had water fences which marked the limits of their plantations seaward, and some had piers extending out into the water. The heavy posts, which would be in deep water at flood tide, were mysteriously hauled up, and I am informed by a gentleman from this section that the piles of wharves were occasionally similarly treated. For a long time the cause was unexplained, but finally a school of large rays was seen to sweep along and collide with the piles. The fish evidently threw their claspers about them and in the violent struggles which ensued wrenched them loose.

The sportsmen made the attack in eight oared barges propelled by negroes, and when the strike was made the barge rushed away toward the ocean, several other boats being caught as they passed until the fish was towing a procession of craft. This was the initial fish, which measured twenty feet across, and from that time on the exciting pastime became the sport above all others of the Sound region. The catches were marked by many sensational features. On one occasion Mr. T. R. S. Elliott was the harpooner, and when the fish was struck it cleared the water, striking the boat in the bow, sweeping away all the oars on one side, and sending her astern so violently that every man in the barge was thrown from his seat and one or two severely crushed. The man at the helm, James Cuthbert, was pitched headlong on to the deck, while Mr. Elliott took a flying leap into the air, landing upon the back of the struggling fish. He was fortunately hauled aboard before the ray got under way, and stood on the little deck, drenched, and raised a cheer as the boat moved off behind the wild steed.

The legend heard in the Pacific that this fish envelops its prey with its cloak-like wings may be traced to the ancient authors, among whom Oppian writes, "It is the broadest among fishes" (*Eurotatos pantessin metichthusin*); and he further describes its habit of seizing mariners, sinking with them and smothering the victim beneath its wings. This belief is still held by the pearl divers off the Southern Gulf Coast. The truth is that while the fish makes a

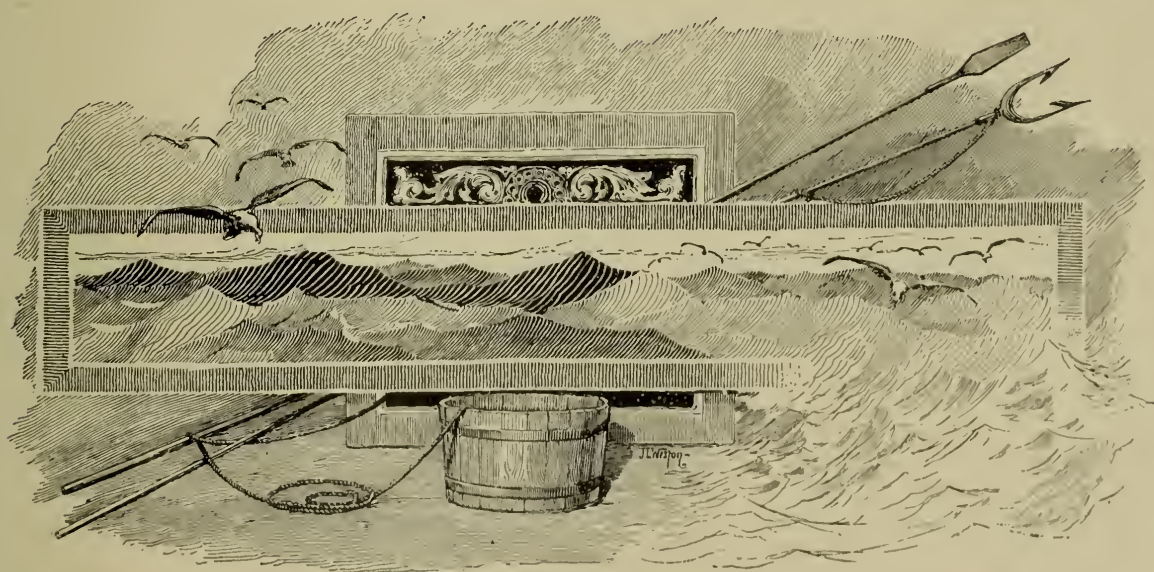
remarkable fight for its liberty, it is timid and never attacks ; the fouling of anchors, the leaping upon boats being mere accidents attendant upon the movements of a large fish in agony and fear.

In following this sport in Port Royal Sound the sharks were often a factor to be dealt with, attacking the wounded sea vampire in such numbers that while being towed by a fish Mr. Elliott took with a line as many as six hammerheads which were following the trail of blood ; vicious monsters ranging up to nine feet in length.

In its peculiar somersaults the bat is not unique, as I have repeatedly observed the California banded sheepshead roll over and over ; yet in so large a fish it is a remarkable act. Merely venturing an opinion I am inclined to think that this may be a feature of courtship, and nowhere have the strange gambols been so often observed as in Port Royal Sound. Here the fishes were repeatedly seen by Mr. Elliott, as I saw them once in the Gulf of Mexico, swimming in a circle, black and white flashing at intervals as they

somersaulted ; now swimming upon their backs ; now vaulting into the air and while in this position falling upon the back. Sometimes the act would be performed in deep water, the flash of the white ventral side alone telling the story of the turn ; again the water would boil at the surface, the horns appear and the huge fish would roll completely over until its tail lashed the air in its descent. So commonly was this trick performed that more than one of the fishes taken by Mr. Elliott was harpooned in the belly.

It is believed that specimens measuring nearly thirty feet across have been seen. Mitchell refers to one caught in the West Indies which required six oxen to drag it up the beach ; but the average ray taken on American shores, which the sportsmen may expect to find in the summer months from Port Royal Sound to Garden Key and up the west coast of Florida, and in Lower California, will rarely exceed eighteen or twenty feet in width—large enough to afford some of the most exciting experiences in the annals of sport with the spear at sea.





"THE DARKEY DOES NOT LIVE WHO CAN STOP A SMILE AT THE SIGHT."

A NORTH CAROLINA 'POSSUM HUNT.

By F. A. Olds.

THERE is no sport which possesses a tenth of the fascination for the negro, certainly for the North Carolina negro, that "'possum huntin'" does. The 'possum is something which brings to the surface all the unctuousness of the darkey, and the darkey does not live who can stop a smile at the sight of one of these queer animals.

The prerequisites for a hunt are a negro, an elderly one preferred, a couple of dogs, kept up during the day so as to be "sharp" for the hunt, a light, an ax, and a sack. There are two kinds of hunts. One is "de all night," the other "de half night." The darkeys say, "De bigges' 'possums walks jus' 'fo' day. De kitten 'possums comes out early. But none un 'em walks when de moon's shinin'. Dey's 'feard o' dey shadder. Den deys curus 'bout layin' up in de col nights. In er mighty col' time you ketch er 'possum, en' look at de tip o' his tail. You'll find it right raw, en' sometimes chawed right down to de bone. He don't want to leave his warm bed en' go out, en' so he sucks his tail." So says the veteran 'possum hunter, while he is "fixin' de things," in other words, getting ready for the hunt. What he says is an odd mixture of fancy and fact.

The "fixins," or as our particular hunter commonly says, "de 'rangements," are the filling of a swinging tin can with oil for the light, this having largely replaced the more uncertain "light'rd knots" (as the darkey terms the splints of "fat" pine); the tying of the sack around the hunter's neck with a string, and the passing of an ax handle down the back, under the coat, so that the head of the ax is held by the collar of the coat. When these 'rangements are completed, the dogs are released from bondage and immediately become as if crazy, for no pointer or setter is keener for a hunt than the 'possum dog.

These are the hunter's part of the 'rangements. The white man must be prepared to do some "fixin'," too. The chief preparation on his part is in the shape of a sizeable flask of whiskey, for where is the darkey to be found who does not "love a dram?" Not on this

earth. It is considered very bad form to take a drink until a 'possum is caught, though sometimes a tired darkey, after quite a long period of ill success, will "take a nip." He will say: "Has yer got *dat* 'bout yer?" You know what he means by *dat*, and say, "Yes," and then he says: "Well, I b'lieve I'll jus' take a smeejum." By this he means "a little taste."

A night the 'possum hunter adores is "in de dark o' de moon," and when it is rather warm, after a few frosty nights.

"De 'possums'll be er walkin'," says the hunter. 'Twas such a night when our feet were pounding along the road, and we were making for the woods, where the torch is lighted, and the dogs begin their work. They range far through the woods, always knowing where the light is. Sometimes they come near, and then there is a ghastly vision of a pair of yellowish-green eyes, and you forget the dogs and think of panthers and other long gone ravenous beasts.

Suddenly there's a bark. "He's trail-in'!" says the darkey hunter. "Trail him!" he yells. Quite soon the barking is in one spot. "He's treed!" is the next exclamation, and two dog voices make the woods vibrate, and stir the blood. The dogs are located at the foot of a black-gum tree, on the very edge of a cotton field, and surrounded by rank briars and water. The hunter turns his back upon the briars and smashes his way through them to the tree. "I bet it's er kitten," says he (kitten being the term of half-contempt for a young 'possum). He reconnoiters, to see where the 'possum is. Adroitly holding the light behind him and low down, he "shines" the 'possum's eyes, then calls you to come and see. "Umph, dat ain't no kitten," is the verdict. "Look at de space 'tween dem eyes. He's er big un!"

The darkey, all excitement, directs that one dog, who he says "is too rank and will jus' nacherly eat er 'possum up, jus' chaw him up," be held. The duty of the white man is therefore to hold that big and struggling dog, while the negro cuts down the tree. "I'm er gwine ter throw it in de fiel'," says he; meaning he will cut it so it will fall in

that direction. Whack! whack! goes the ax wielded by a practiced hand. Presently there is a creak, a sort of whisper, and down comes the tree. At the instant of the crash the hunter springs into its top, to get the 'possum. The dog actually runs along the tree. "Don't let ole Blue git loose!" yells the darkey, and in an instant takes the 'possum by the nape of the neck, with great adroitness slipping the hand along the back until he gets on the neck, for the bite of the 'possum is something to be dreaded. As the nape is squeezed the mouth of the 'possum opens like that of a shark, red and with shining teeth, and with eyes which glisten like beads. The bag is opened and the game dropped in it. Then to be sure the remark is made, "Has yer got dat 'bout yer?" and quite a vacuum is made in the flask.

We take a new course in the woods. Presently the dogs are trailing again, but it is all trailing, ceaseless running hither and yon. "What do you reckon they are after?" the white man asks. The darkey replies, sententiously, "Er rabbit, er maybe er hant. Some dawgs runs hants half de time. Some un 'em is feared o' de hants, but my dawgs runs pint blank atter 'em." The dogs' quest is in vain. The great question, whether it is a rabbit or a "hant," remains one of the unsettled problems. "Hant" is the darkey name for ghosts or "sperits." Without a dog these are dreaded, but the presence of a dog appears in some way to lessen or remove danger and fear, unless the dogs come in and refuse to hunt, but slink behind their master, with tails between legs. Oftentimes the dogs will refuse to hunt any more that night. The old hunter recalls a time when his dogs treed in a strange piece of woods, or rather, he thought they had treed. He went to the spot. "Dey wuz er trimblin', and er shakin'," said he, "er standin' right in front of three lights, and dese lights wuz jus' er dancin'. De lights den move of a sudden, 'en de dawgs fairly fly. I jus' biled out o' dem woods. Dat wuz de fus' en de las' time I ever see er hant. Dem dawgs wuzn't fitten ter hunt in more 'n er fortnight. I never didn't go in dem woods no mo'."

While the old man tells this ghost story there is only the crunching of leaves under foot, but as its last word falls from his lips there is a quick

"tree," and away we go to get to the dogs. This time they are at the foot of a scrub oak, which supports a grape vine, that of the muscadine or buellace. The vine is very thick. It requires some time to "shine" the eyes, but finally the 'possum "stands confessed." There is quite a cluster of little trees. The one with the vine is cut down, but the 'possum has, during the latter part of this operation, climbed into another. Down comes tree number two, and the 'possum with it, but as he strikes the earth he scurries off with his queer movement. Up a bush he goes, close pressed by the dogs. It is too small a bush to be worthy of the ax, and so the 'possum is shaken out. This time the dogs get him, but he is snatched out of their very jaws, snarling and bloody-mouthed.

The hunt is renewed as soon as the 'possum is bagged. As we go along the old hunter becomes loquacious, and laments the fact that "coons ain't plentiful no mo'." A coon hunt, it should be stated, is a bigger affair than a 'possum hunt, as the 'coon "gits in the bigges" trees en fights like de devil," as the hunter remarks and adds, "If you gits one 'coon er night you does well." He tells about how "once upon er time my 'coon dawg got er 'coon in de crick. Dey fout en dey fout dere in de water, en finally de 'coon hel' de dawg under and drowned him. But de dawg hel' on, to, atter he wuz dead, en I got dat 'coon atter all."

We come to a little open space. In this are two or three small persimmon trees. As we are in the act of looking on the ground for persimmons the dogs make a frenzied rush and an instant later the body of a 'possum swings in the air between their eager jaws. Like a flash the old man goes to them, but they have pulled the 'possum into two parts. These the hunter takes. "Dat 'possum had been a eatin' er bait o' 'simmons," says he.

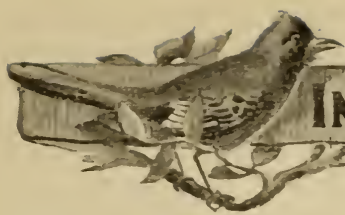
Walking on through the woods, the dogs give a quick bark and then there is stillness. The hunter, with practiced ear, says, "Dey's in er hollow log er stump, shore." Sure enough they are in a hollow log, a butt, which is part of a "windfall," and they are literally in the stump itself. "Dere's where de 'possum's bed is," remarks the hunter. "Jus' wait, dey'll git him." And sure enough one dog pulls the reluctant 'possum

out. This 'possum is very nearly black, the others being a "whitey yaller," as the negro terms the color.

A long sweep through heavy timber is next made, but is resultless, and we start for home, a good four miles away. We strike a road and before we have gone far reach a small stream. Beside the road this forms a little pool and over this is a small bush covered with bamboo or green-brier vines. All at once the dogs "go crazy," as the hunter remarks. One is in the pool, looking up and splitting the air with his barking. The other pulls at the vine, wild to get at something which he, like his mate, sees. "I sees him!" cries the old darkey, "en he's er right good size un. I'm er gwine ter just pick him right off'n de vine." He suits the action to the words, and in less than a minute that 'possum is in the bag.

'Possums are never eaten directly after they are caught, but are fattened. Usually this is done in strong troughs, divided into compartments, one for each 'possum, for they are selfish beasts and fight savagely. They are fattened with "scraps" from the table, some persimmons and cabbage leaves, and artists in the fattening line give them apples. The 'possum, fattened, but not too fat, is boiled and then baked and placed in a big dish. Around him, as he lies in state, are placed sweet potatoes, boiled and then baked, and all is given a liberal application of vinegar and red pepper. It is then put away until cold. Then comes the eating of the 'possum. He is the "pièce de résistance" of a "supper," and is to a North Carolinian, white or black, what the head of the wild boar was in the olden times at a feast in "Merrie England."





IN THE WAKE OF A BIRD-LOVER

By H. W. Morrow.

THERE is a charm about the city of Washington and its surroundings that is all its own. It is not so much the mere beauty of the place, although it is a beautiful city and lies in the midst of a country of great and varied attractiveness. It is not altogether its parks and its statues, its fountains and trees, its broad, smooth streets and avenues, its great Government buildings overtopped by the mighty dome of the Capitol and the still more lofty Monument. It is not its "electric autumn air," its mild winters, and its leaping, gushing, bubbling springtime, when flower and vine, and tree and shrub, and the million things that live and grow and breathe and blossom and sing in its parks and gardens and lawns, seem to engage in a wild scramble to decide which shall be first in beauty and fragrance and music. Not the broad Potomac which fronts it, nor the approachable and friendly wildness of the surrounding country. Not the scenes which have been enacted in the halls of the great building on the hill; its historic homes with their memories and traditions of statesman and soldier, and women famous for their beauty and wit, nor the White House with its noble elms, standing where was once the orchard of that eccentric Scotsman, Davie Burns.

It is not any one, but all of these that give the place its charm. And not less than any, and perhaps consequent upon all of them, is the absence of hurry and bustle, and the presence of a leisurely calm seen in few American cities of its size and importance.

The Washington of to-day is not the Washington that John Burroughs tramped about and admired during the years when he was an employee of the Treasury Department, from 1863 to 1873. The streets he traversed looking for birds, and in which he often met Whitman enacting the part of an angel of mercy to sick and wounded soldiers, were limited

in extent and must have been anything but attractive in appearance.

The town was then mostly clustered about Capitol Hill and on the lower flats, leaving the hills to the north to the birds and flowers and trees and cattle. The author of "Wake Robin" would not now need, unless so disposed, to climb Meridian Hill to reach his beautiful Rock Creek region. The hill itself is almost covered by fine dwellings, and he could scurry out over it on the Fourteenth Street electric cars almost to Piny Branch.

On the other side of Rock Creek the electric cars will whirl you seven miles out across the line into Maryland, but the enthusiast will prefer to walk; for who knows what discovery may be made on the way, even within the city limits? Alas! those "few touches of art" which are to convert this region into "a park unequalled by anything in the world," have been made. Two thousand acres (I believe that is correct) have been purchased for a national park, and two hundred acres, or thereabouts, have been converted into a zoological garden. Woe be to the unlucky botanist or ornithologist now caught poaching thereon. I would not be understood as regretting this. Government ownership was undoubtedly necessary for the preservation of this district from the ravages of the woodman and the real estate speculator; but one cannot help regretting the touch of art that converts any accessible wild region into park-like beauty, no matter how sympathetic the hand that does the converting.

It is easy to have parks; a little money, a little energy, more or less taste, and you have rustic or stone bridges, graveled drives and walks, cunning nooks, velvety grass, lakes in miniature, pavilions, flowers of all hues and shapes and sizes. It can all be done in a short time. But only the genius of Nature, working through

long years and centuries and ages, can make a wild wood leading down to a rocky gorge, through which the clear waters of a creek tumble and laugh and loiter and sing and glide as do the waters of Rock Creek between the banks that give it its name. The very birds and squirrels of a park become bold and pert, and sophisticated to a degree that leads one to suspect them of ability to read the ostentatious signs stuck up at intervals prescribing suitable fines for interfering with them in their daily avocations, whether of work or play.

But all the Rock Creek region is not in this park, and a great part of what is included is still in about the same state of wildness as it must have been when Burroughs wandered through it; and here, several years ago, I came upon a survivor, or perhaps a son or grandson of some member of that eerie buzzard crew that he frightened away with his fire that July night in 1868.

I had been pursuing from afar what seemed to me like a new note of the Carolina wren, when a branch dropped at my feet as it were out of the sky, and looking up I saw a large vulture just getting under wing. The spring it made had broken the dead limb on which he had been sitting. It circled high in air for at least half an hour, but finally ventured down again and alighted nervously on a red-oak tree. For perhaps five minutes it sat with its wings extended almost as widely as in flying,

peering downward, twisting its ugly red head from side to side in the meantime, and continuing this for probably ten minutes after lowering its wings to its sides. Although I kept as still as possible, lying closely under the bushes, it did not seem satisfied, and flew away without returning to its feast. I had not seen it look my way at all.

Did this bird locate by the sense of smell or by sight the choice morsel of carrion on which it had been feeding?

It is difficult to answer. I have recently seen this question learnedly discussed somewhere, but have forgotten the conclusion arrived at.

If birds have a sense of smell, they must be indifferent to the most offensive odors. Everyone must have noticed that the ordinary barnyard fowl and the English sparrow take their food from the most disgusting places without any apparent repugnance, and few birds are at all particular in this respect. The Maryland



THE BALTIMORE ORIOLE.

yellow-throat nests serenely in the midst of the skunk-cabbage. Not five minutes before I disturbed this turkey vulture I had been watching a small shore bird that was walking along the sand and occasionally wading into the waters of Piny Branch, pecking at everything in sight not fifty feet below where the Mt. Pleasant sewer empties and where the odor was such that I gave up the chase. And one evening in June last year, in and about a little ravine where one of the sewers of Nebraska City empties, I



THE CARDINAL GROSBEEK.

heard the wood thrushes sing divinely, one of them the best singer that I ever heard, with a single exception. I heard cat-birds sing and mock, found two yellow-warblers' nests, both, to my surprise, built almost entirely of wool, one of them not more than half completed; heard and saw a Maryland yellow-throat in the wolfberry bushes; saw a robin pecking in the black, malodorous dirt; an indigo bird gleaning in the terminal leaves of the willows after the manner of a warbler; a yellow-billed cuckoo, of which I made a note, and perhaps others. The air of the ravine was most horrible, but the birds sang and fed and built just as cheerily as though the odor had been that of an orchard or a clover field in full bloom.

Per contra: Are the nostrils of the oriole entirely indifferent to the perfume of the apple blossoms with which it comes to us? Is the scent of opening buds and blossoms and green growing things altogether lost on our feathered neighbors and friends?

After all, is it not possible that we place too much stress on what we are sometimes pleased to call the human at-

tributes of the birds? Do not most of them replace a dead mate with a businesslike haste that robs the transaction of all sentiment? I have tried, and can discover no difference between the warble of the summer yellowbird and the song of the cat-bird before and after their nests and young have been destroyed.

For instance, on the morning of May 30th, 1897, I heard a wood-thrush sing in the Soldiers' Home grounds at Washington, D. C. The song of this bird was superior to that of any other that I ever heard with the exception of the Nebraska City bird mentioned. It had a rich, sweet double roll on the lower flute notes and a habit of very frequently ending its song with a low-toned, liquid thrill that I have heard very seldom. A short distance away, saddled onto a very low limb of a big, spreading white oak tree, directly over a path where a great many people passed every day, and where I could stand and reach to within three feet of it, I found the nest with the mother bird brooding on four eggs.

On the morning of the fourth day of June, while I was sitting under the tree, the female bird came to the nest, and before taking her place on the eggs, stood at the side of the nest, peered into it, turned her head sidewise, and gave a low, gurgling coo. It was just as plainly loving and motherly as the cradle song of any mother who croons softly over her first born. I was ready to think and talk and write enthusiastically on the subject. On the nineteenth day of the same month,



THE CAROLINA DOVE.

having been detained for some reason, I went back and found the crushed and despoiled nest lying on the ground with an old base ball, evidently the instrument by which it had been dislodged, lying beside it. The work of destruction was very recent, but, although the birds were flying about a little wildly, the song was just as sweet, just as superior, not one whit sadder than before. Are the birds insensible or inconstant, or does the same song express both sorrow and gladness?

Burroughs does not mention these grounds, probably because they are parky and a little tame beside the Rock Creek region; but there are grassy meadows where the meadow lark's tuneful piping can be heard, uplands beloved of the vesper sparrow, clumps of evergreens where the purple grackle loves to con-

gregate and creak its rusty hinge notes, shrubbery for the cat-birds, wild woods for crows and woodpeckers and nut-hatches—everything that the most fastidious bird could wish.

The woods and fields that he mentions as visible at the end of New York avenue from North Liberty Market are still there, and probably very little if at all changed. While I was in Washington, between 1890 and 1897, no hay was

made on the field that slopes down from the wood toward the city. Cows grazed there in summer, and the surface was unbroken by haystacks in winter; otherwise, there can be little change. You go in a break in the wire fence that admits you from the Bladensburg road to a path through the wood made by the residents of Ivy City, just beyond, carefully avoiding the remaining

barbed wires and a sign which says, "No Trespassing." The wood and field corner right here. A little ravine comes down through the wood and cuts off the corner of the field, which is grown up with scrub oak and briars, so that it would be hard to tell just where the field ends and the wood begins if it were not for an old brush fence that separates them in a crooked line up the hillside.

It was in this brush fence that I

met my first California wren. I had been watching the antics of a nut-hatch when I heard what I expressed then as a low-toned, gurgling whistle. I followed it up, and found the bird scratching or pecking in the dead leaves down under the brush. It discovered me first, and began scolding me vigorously, after the manner of the house wren. I got within three feet of it, and it stubbornly refused to be driven away, although it

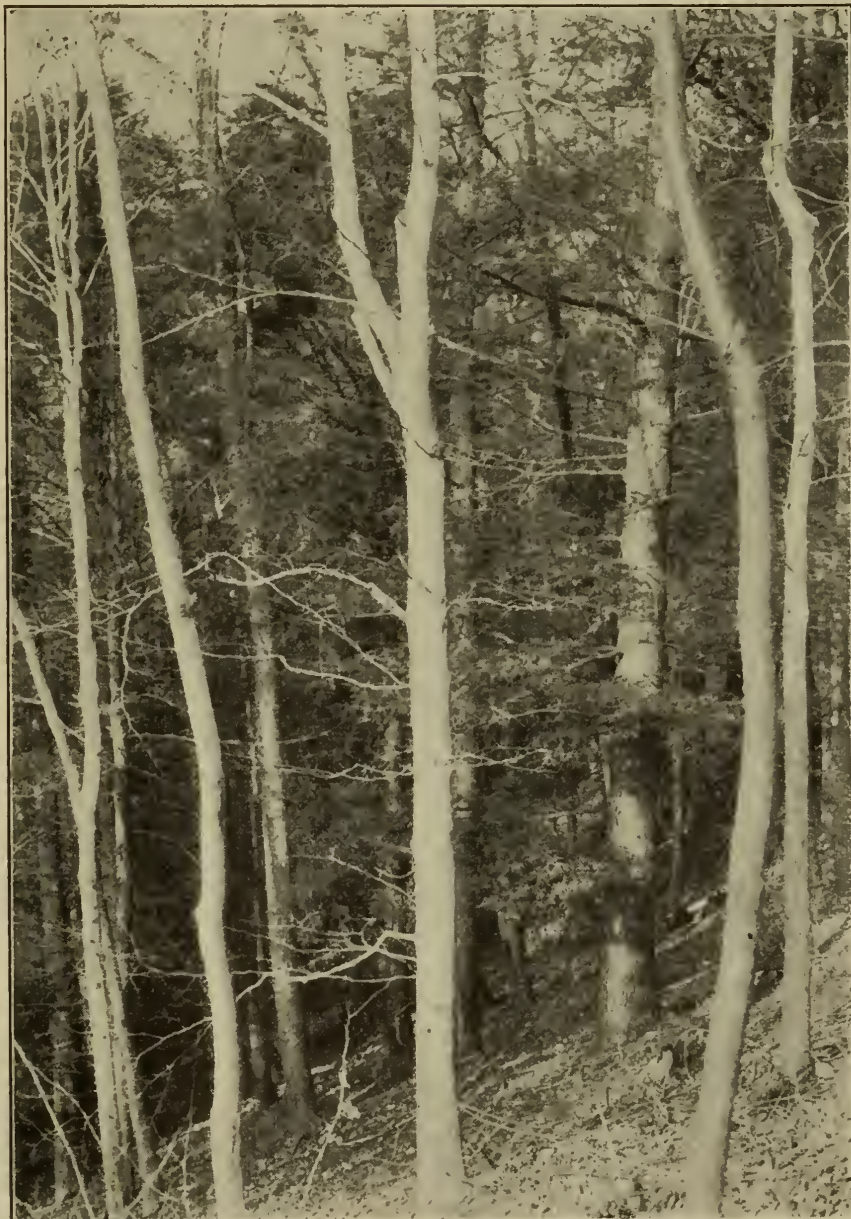


Photo by C. Grant La Farge.

"ONLY THE GENIUS OF NATURE CAN MAKE A WILD WOOD."



THE MEADOW LARK.

dodged around behind the dead limbs so that it was not easy to get a good look at it. Its actions were all those of a wren, from the cock of the tail to the nervous flitting motion. I slipped back into the bushes till it evidently thought I had gone, and resumed its old occupation. I then slipped up close again, and watched it for a long time. It scratched among the dead leaves, and hummed to itself for all the world like I have heard a woman hum a little tune while busily engaged at her sewing or knitting or mending. It was really the most attractive and home-like thing I have ever seen a bird do. I saw a great many of these birds afterward in the woods about Washington, but could never get close enough to any of them to see or hear them as I did this one. The Carolina wren has a voice of great sweetness and considerable carrying power. It has a great variety of notes, the one I have heard most being a liquid "tow-wheé-dle, tow-wheé-dle, tow-wheé-dle," and the longest "chee-whoo-dle-é-te, whoo-dle-é-te, whoo-dle-é-cé." It also says, at times, "whee-dle-dé-o," several times repeated. I haven't much faith in the ability of any one to render a bird's song in print so that it can be recognized, but anyone who will whistle the above syllables, with the accent as placed, will get some idea of this bird's song.

While watching this wren I heard the flicker's "kee-yer," repeated so often and so vigorously that I knew something out of the ordinary was at hand and looked it up. I soon found the head of a male flicker sticking out of a hollow hickory stump where the tree had broken off about fifteen feet up, leaving a long

sliver standing at one side. I climbed up and found four beautiful young birds, all with the black mutton-chop whiskers and other markings of the male. It was easier to take one from the nest to examine it than it was to return it to the nest, and, as I was simply hanging there, it finally got away from me and flew off down through the woods, giving me a beautiful view of its white rump. The position of this nest seems to disprove what Burroughs says in "Wake Robin," that woodpeckers *never* choose a natural cavity for the nest. This woodpecker had laid its eggs in a high hollow stump just as the bluebird does at times in a low one. I have also known the red-head to cut its nest out of the body of a green tree, although he says it always selects a limb dead enough to be easily cut.

If I had been posted at the time, I might have found the nest of a ruby-throated humming-bird this same day. I heard the sharp "pit," "pit," of a young bird and soon after found a little brown bird with a comically short tail, just able to keep out of my way by flying from one to another of the tall bushes in the corner of the field. I could not make it out till the male indigo bird made its appearance and disclosed its parentage by its very evident distress. While pursuing this bird, something darted past my head and circled round the father like an angry hornet. It repeated this several times, each time returning to a perch well up in an oak tree. I didn't know that the finding of this mite's mite of a nest ranks with the finding of that of an eagle, and so went on noting the



THE BOBOLINK.

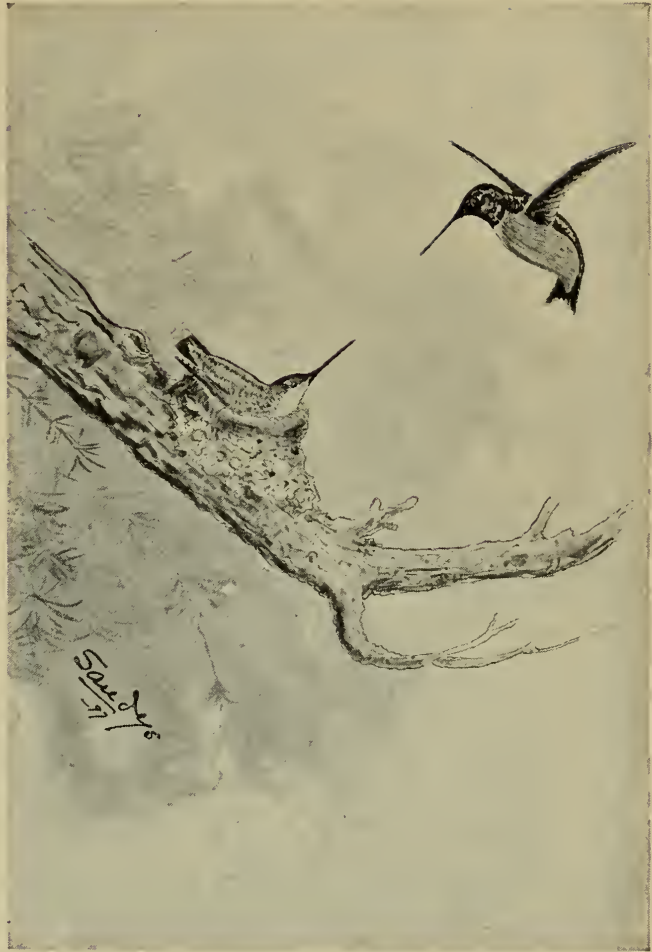
resemblance of the young indigo bird to its mother. So do we let opportunities slip by us.

The first time I entered this wood it was to me a veritable fairyland. I knew not its size, shape, lay of the land nor what was beyond. Its many paths twisted this way and that, crossed and intersected, led anywhere or nowhere. The big white-oaks stretched out their gray arms high above, and the crows cawed among them; the red-eyed vireo lisped and the cat-bird squealed in the lower shrubbery; here and there were partly open places where old roads had been, and among the mosses a few scattering houstonias had taken root; there were wild grasses and mandrakes, and in places nothing but the dead leaves of last year under the thick covert of the bushes. Taking a path by random, I followed it up a little ravine to the right and soon disturbed a brown leghorn hen at her morning meal. Her protest was answered by a huge Plymouth Rock rooster, and I felt a distinct sense of disappointment. Chickens!

But there was more than chickens at the end of this path. First came a dilapidated lodge; windowless, doorless, partly roofless, and with the stucco hanging in shreds and patches. Beyond this stood an old, rambling colonial house, equally dilapidated, with hanging broken shutters and a generally battered and unkempt look, but with unmistakable evidences of occupancy. Mindful of dogs I kept around to the left and soon found myself in the most delightful old garden imaginable. Wide-terraced, with box-bordered graveled walks, battered and broken and ruined like everything else around it, rose bushes once rare and costly perhaps, but much more beautiful in the wild ragged state to which they had returned; cherry trees grown tall and spindly, twisting their branches among those of the oak and walnut; a gardener's house half covered with ivy, the roof fallen in and a great ragged hole in one side where the bricks, doubtless im-



THE HOUSE WREN.



RUBY-THROATED HUMMING BIRDS.

ported, had fallen out; a thick wood of oak and elm and hickory and gum and dogwood surrounding it on three sides, and apparently endless in extent. It must have been a beautiful place once, and it is beautiful yet; but more fit for the occupancy of cat-birds and screech-owls than for men and women and children.

While I was looking about, a lank Virginian came out and watched me rather suspiciously. Finding I didn't molest anything he came closer, and showed a disposition to talk. And his talk was interesting. He told me the place belonged to the widow of a naval officer, at one time prominent, long since dead. The widow, he said, spent all her time in Europe, while her property waxed valuable under the steady growth of the city; but the house and grounds had gone to ruin during his office, he merely occupying a few rooms rent free for keeping the place free of tramps and tough characters from the city and elsewhere and making his living out of a small dairy.

One hundred and fifty acres, I think he told me, is the amount of land in the farm, and for this the owner had been

offered about two thousand dollars an acre several times. Think of it! Three hundred thousand dollars' worth of land for a play-ground for blackberry bushes and catbirds and mullein stalks and screech-owls and red-headed woodpeckers and May apples and rabbits and a few stray chickens and cows. May she hold out for five thousand dollars an acre—and never get it. And may the Rock Creek Park Commission, if there is one, be as slow as such commissions usually are. Often after a stroll through this wood and a look from the brow of the hill at the view of the great white dome rising above the

if prophetic of the future of the country, the hill upon which it stands and the now real and imposing front of the building look away across the intervening city and the Potomac marshes, to where the sun sinks to rest behind the hills of Arlington and Virginia.

From the marble terrace which this contrary growth made necessary on the west side of the building, when the sun has ceased to



THE DOWNY WOODPECKER.



"WHERE THE FIELD ENDS AND THE WOOD BEGINS."

city, that so pleased Burroughs, I have finished up with a view that he could not have had, at least while he lived in Washington, for the best of it was not then there. The main part of the city, as is well known, is not where it was intended and expected that it would be. The ostensible front of the Capitol and Liberty look toward the eastern branch and the rising sun, but, as



THE BROWN THRUSH.

guild the dome—ceased even to tip the monument—is a view worthy of more prominence than it has ever attained. One by one, from out of the black-green foliage of the Mall come starry lights, not unlike those other brilliant lights that are being uncovered millions of miles above them. The sky slowly darkens and softens, and the air comes up from the Potomac cool and moist. The thousand-tongued voice of the city loses its harshness and becomes a subdued hum, like almost to that of the country when the wind is in a playful mood. The very street-car gongs seem to neglect their nerve-racking power and become almost musical in the distance. The birds twitter drowsily in the English ivy that covers and beautifies the stone fence surrounding the grounds all unnoticed, for here is

something mightier, more fascinating for the time, than they. It is all so peaceful, so comparatively quiet, it is hard to realize that hardly out of sight and hearing are drunken orgies, wicked plotting, murder, disease, and unhappiness.

Much has been done in the past twenty years to redeem the surroundings of the Capitol from their old-time squalor.

Those who know will tell you that in those times from the Capitol to the Treasury it was "The Great Serbonian Bog" satirized by Tom Moore, and that in the war it was no uncommon sight to see artillery mired almost beyond removal.

Now for one mile from where you stand to the Treasury Building stretches "The Avenue," broad, straight, clean, and beautiful. Fourteen streets cross it at right angles and a great many at various other angles. At each intersection an electric light, itself often invisible, throws a white bar across its smooth surface, making a great ladder of light reaching out into the distance.

The street cars carry their yellow or red or green lights up and down this ladder stately, and except those in the immediate foreground, noiselessly, and

beside and around these scurry and twinkle the rainbow-hued lights of the wheelmen and drivers with whom the avenue is so popular.

The shops that line the way add their yellowish glow, till the whole street is a rosy golden glimmer, with the white bars still and always showing.

The ugly and inadequate buildings are

lost sight of, and one can almost forget this world of barter and sale, and duties and responsibilities, and go back once more to those childish days when ladders of light reaching to the stars, peopled by fairies, were real things in our youthful world.

It is good to look upon such things as these.

The woods and fields make us selfish at times, and unjust in our estimates of the works of our fellow laborers.

We come to hate the noise and bustle of

business and politics and the professions, and exalt in our minds, perhaps unduly, such men as the genial owner of "Slab Sides."

But the rough work of the world must be done, and it is well to be reminded at times that, while the works of nature are beyond comparison beautiful, so also are the works of man not altogether ugly.



Photo by C. Grant La Farge.

"THROUGH WHICH THE CLEAR WATERS OF A CREEK TUMBLE AND LAUGH."



* TO "JIM"—

By Ernest Seton-Thompson.



ME Jimmy's hit the breeze to-day,
 An' I guess I've taken ill.
 Yet at daylight, I felt so bright
 Corrallin' Flax an' Bill ;
 But now, I feel so old an' broke,
 My work an' play both pall—
 Things ain't the same—I sorter guess
 'Twas Jimmy done it all.



I'm back in Yancey's shack agin,
 So nice it use ter be
 With its rough-hewn walls, an' huge,
 bright fire,
 It done one good to see ;
 But now the darned old squalid hut's
 About as sweet as gall—
 The wretched pigsty's glamour's gone—
 'Twas Jimmy done it all.

They call this Pleasant Valley
 And I use ter think that right,
 With its gorgeous peaks an' emerald sweeps,
 An' Yallerstun in sight ;
 But all them views an' charms an' things
 Hez panned out mighty slim—
 Git up ! ole mare ; come, pound the trail—
 I guess I'll foller Jim.



• "Jim" is Mrs. Seton-Thompson. She left their mountain camp at Yancey's, in Pleasant Valley, on the Yellowstone, a few days before he did.—THE EDITOR.



By Leland Howard Ives.

"DON'T you do it; don't think of it. Unless you are one of the strongest, it will be the death of you. I know of two soldiers who pushed through from San Juan to Ponce in a day, and it was their finish." Thus the mining engineer delivers himself in the smoking-room, while the little *Arkadia* wallows sluggishly toward Puerto Rico. I have mentioned my plan of wheeling through the Island, and the funereal prophecies that greet me are so palsying that I find myself wishing my little blue-rimmed chainless in its crate under the fore-hatch, was fifteen hundred miles astern, back in the Nutmeg State. The result falsified the evil predictions.

San Juan is too cramped and congested to make wheeling tolerable; altho' the streets are smoothly paved with slag bricks from England, they are narrow; but out from Cataño, a suburb across the ferry, is a road that one can unhesitatingly call magnificent; so when a Spanish friend urges me to try it with him awheel, the morning following my arrival I gladly abandon a horseback trip and see the sun rise at the ferry slip. The palms and other tropical growths idealize Cataño as we draw near and churn on up the shallow canal to the landing.

It is yet quite early, and fairly cool, not unlike a June morning in the vicinity of New York: "How far on extends this nice road?" you ask. "You can proceed to Toa Alta, señores, only, about 14 kilometros, and the hills are easy." From the very outskirts of Bayamon, the route is continuously up hill and down, past much grazing land stocked with splendid-looking cattle. Cocoanut palms, well laden with clusters of green nuts, are plenty enough, but it is difficult to get any fruit. By the time the sun is well up our thirst is truly tropical. Dismounting at a wayside

pulperia, we open negotiations with a weazened señora, squatting in a doorway, puffing a strong, black cigar, and nursing a naked baby. I suggest that we could use three or four of the water coconuts that hang invitingly near. "No! there is nobody to climb the trees."

At regular intervals are the square, massive stucco houses, occupied by the *camineros*, road workers, who are always busy in keeping in the best possible condition a certain division of the roadway. Heaps of lime-rock are dumped at intervals, and these fellows must break it up, spread it where needed, pound and roll it until nearly as firm and smooth as asphalt. They can always find time, however, to chat with travelers. "Couldn't you climb that palm, and throw down a few nuts?" "Oh, but the overseer will soon be along, and it would never do to be found in that business." A few coppers will go a long way, however, with men who earn twenty-four cents a day, and the wiry-looking *peon* concludes to chance it.

Climbing the towering, slender palm trunks is work for an acrobat, and he is completely winded by the time he reaches the ground again. Then, with his machete he deftly chops off the ends of the nuts he has thrown down, making an orifice just big enough to drink from. The limpid contents of a green nut are marvellously cool and refreshing, and one who knows only the ripe fruit has no conception of its crystalline contents when the white meat is in the jelly stage.

Our destination, Toa Alta, holds out few inducements to linger, but its plaza is an attractive spot, flowering as it is with a jungle of strange shrubs. Around this tropical exhibit our wheels roll slowly, while a battalion of tattered gamins trot close behind. The populace generally assembles to stare, but all is perfect stillness; not a sound, not a demonstration, except the patter of bare



COCONUTS AND ROYAL PALMS ON THE ROAD TO CAROLINA.

feet, and we sweep on out of town again, retracing our course to San Juan.

We coast a steep straightaway of more than a mile, pass through Bayamon without a stop, for it will soon be noon, and breakfast waits. The 5.30 *desayuno*, a small black coffee and a tiny roll, was right good in its way, but there is something better ahead. At Cataño, in the absence of the steam ferry, a sailboat serves. Through the early morning the harbor is often glassy, but before noon the northeast trades strike in, then a latteen-rigged boat will make the passage as quickly as a steamer, and be it ever so slow, a crossing is always enjoyable.

Landing amid a fleet of small craft, we find a well-paved plaza, faced by a quartet of newly-fledged saloons flaming with advertisements of various brands

of American whiskies and beers.

The mid-day meal or breakfast at the Hotel Inglaterra, as elsewhere in the tropics, would be classed as a dinner in the States. Olives, soup—rich and heavy—then omelettes or eggs, fish, rice, all sorts of vegetables, fried bananas, stews, steaks, chops, salads, sweets, fruits, cheese, and black coffee that is indeed a dream. A heavy Spanish claret, cheap and good, is the usual beverage, more like a California wine than a Bordeaux.

All San Juan rests during the middle of the day. Business is suspended about eleven o'clock, and stores and offices reopen at two. The Colonial Club is a gathering place for Americans. Here are papers and periodicals, not too recent, from the States, and all the little happenings of the American Colony are gossiped over through the drowsy afternoon hours. High, the temperature certainly is, but the trade wind blows cool and strong, and this climate is much more comfortable than most of our northern August weather.

After the long-drawn-out seven o'clock dinner, much like the mid-day *almuerzo*, but with still greater variety of highly-seasoned garlicky preparations, the Plaza Alfonso is the attraction. Here the regimental band of the 11th Infantry holds forth, while a curious human medley swarms circling in a slow procession; officers and their wives, private soldiers, all classes and degrees of natives, including the blacks, which is an innovation. But here, as in most Spanish-American cities, the populace retires early, for business life begins again before sunrise.

The early morning hours are gloriously cool, and one soon learns the advisability of getting the earliest possible start for any active exercise. In anticipation of a run to the eastward on the morrow, I



AT THIS SEASON BOWLDERS ARE MORE CONSPICUOUS THAN WATER.

accordingly scrawl No. 2, 5:30 on the hotel blackboard with the heading *llamedas*, and the day is ended.

Quite too soon comes a daylight call, then the black coffee, and off through the *calle de Tetuan*, one of the few streets practicable by bicycle. The grade is easy, but pedestrians choose the middle of the road instead of the narrow footways—it would be libel on the word to call them sidewalks. No attention is paid to bells; carts and clumsy vehicles generally cause continual blockades, so that the rider is off and on his wheel constantly until he reaches the edge of the town, where the easterly wall once stood. Close under the battlements of San Cristobal leads the *carretera*, and it parallels the route of the narrow gauge steam tramway to San Turce and Rio Piedras. Barefooted, scantily - attired peasants are flocking into town, astride donkeys or raw-boned ponies laden with panniers of fruits, produce and fowl destined for the great market, but it is rather late for them, though the sun is scarcely risen. Shaky second-rate dwellings, second-rate even for Puerto Rico, and mites of provision stores scatter along until a splendid piece of mason-work bridges a narrow arm of the sea to the main island.

Up an easy ascent and we meet a light battery out to exercise horses. Then comes San Turce, the better class residence suburb of the capital. One street is made up of neat one and two-story frame and stuccoed houses of foreign and native merchants, not imposing dwellings, but the palms and floral surroundings make all attractive.

Five miles more through levels planted in sugar cane, then a collection of low, disheartened-looking houses and uncared-for streets, Rio Piedras. A glance into the church, here as elsewhere on the island the most conspicuous structure, discloses a woman of evident refinement, handsomely gowned, sweeping the stone flooring, while her maid stands by. "A lady doing penance" is the explanation.

To the southwest curves the military road toward Ponce. A swarm of ragged juveniles start us on an eastward turn. The country becomes more rolling, but the macadam is even better than what is behind us. Cane fields border the way, but it is late in the season and the

greater part has been cut over. Bananas nod all along. Cocoanut and royal palms are always in sight, but the former—with no one at hand to climb the trees—are only an aggravation. At the bridging of a stream we dismount to observe a mother and daughter washing, who appear to be of about the same age.

It is eight miles between barbed wire fencing and Spanish bayonet hedges, from Rio Piedras to the outskirts of Carolina. At a *pulperia*, where a remarkably prepossessing, albeit very swarthy girl of eighteen presides, we eat all the oranges our capacity permits for two coppers; splendid fruit,



"HE DEFTLY CHOPS THE ENDS OFF THE NUTS."

though it grows wild; as good as the Floridas, but not usually so large. As we sit there, monopolizing two-thirds of the floor space, customers come and go. A woman enters with a fighting cock under her arm, and buys a *centavo's* worth of corn. The bird has lost part of its bill and has to be fed from the hand of his mistress, but he is evidently prized for bygone fighting abilities.

"Is there an inn where we can breakfast, señorita?" "Yes, just beyond the plaza is a *posada*, señor"; and indicating the direction with a wave of her shapely bare arm, on which a recent vaccination

blooms, the graceful girl flashes her white teeth in a smiling "adios." We run our wheels into the dining-room of the weather-beaten inn to keep them out of reach of a meddlesome crowd. In the mess of eatables that is finally spread before us, ham, fried bananas, and rice prove palatable. A bottle of dubious white wine helps out amazingly, and makes the prospect of poor roads nine miles hence to Rio Grande seem easy. In years gone by, there was a bridge over the *Loiza*, but long ago it went down stream in time of flood. Now, leaving Carolina, horsemen swim or ford the stream according to the season,



"I WAS POLED OVER."

and the pedestrians are poled across in a scow. I was poled over.

Beyond the river the road proves fairly good, but my comrade's rear tire shows signs of going down, and not even a hand-pump is to be had within twenty miles. So we turn back to San Juan forthwith.

Having now covered the routes fit for a wheel within easy reach of San Juan, the trip through the island over the *carretera militar* remains to be negotiated. Of advice and information on the subject one receives no end; but it is all at variance. In the lightest of light marching order, I finally leave the In-

glaterra one afternoon. Behind the saddle is a package rolled in enamelled cloth. On the head of my wheel is a revolver in a holster. Tool bag and a folding kodak in my pocket, complete the sum total of impedimenta.

Out of the city and on to Rio Piedras the route is an old story. Here the hills begin; nothing severe, but stiff enough. The roadway is excellent but far from being as smooth as it becomes later. This is no lonely thoroughfare. There are coaches bound to and from Ponce, pack horses ballasted with panniers between which the *zibaro* squats cross-legged, always smoking. Pedestrians carrying fighting cocks, a trunk, or a live pig—every possible kind of peasant's property. Too frequently come bunches of cattle that plunge about haphazard, a constant menace. *Pulperias* abound—rough little drinking-places with an unsavory crew of hangers-on.

The crest of a long ascent, fifteen miles from Rio Piedras, commands a view of a plain given up to sugar-cane; encircling mountains are the background, and a compactly-built flat-roofed town fills the middle distance. "Caguas" says a *peon* who happens by, and he stands pinching the tires and jingling my bell while I take in the picture. Wretched streets and squalid, miserable huts greet one entering Caguas, but the plaza and surrounding residences and stores are quite presentable. A genial little policeman points out the inn of Doña Dolores, at one corner of the square. The entrance is through a massive archway into a courtyard encumbered by chicken coops and overlooked by the second story balconies; from this point of observation the madam spies me and bids "come up." My wheel? Yes, the *mozo* will take care of that. A tall courtly old lady from the Peninsula is Doña Dolores; she speaks no English, but her Spanish is true Castilian, in grateful contrast to the hybrid dialect of the average illiterate Puerto Rican. No, I am not too late for dinner, though the rest have finished, the old lady sits down and tells me of the days of Spanish rule.

In the saddle again at sunrise and on southward. Peasants are trooping into town, balancing on their shoulders poles strung with fruits and chickens. Strings of pack horses tied head to tail always

thrown into a wild panic at sight of a wheel, add too much uncertainty to the joys of pedalling. After three miles of easy grades the real mountain-climbing begins. A steady ascent for six miles becomes monotonous, though the lime-stone surface is well-nigh perfect and the gradients have been studied with consummate engineering skill. I push along, zig-zagging for awhile, then get off and walk, climb on again and ride, then more walking. With the increasing altitude, tree

ferns droop over the way. Coffee plantations shaded by banana palms occur all along, and cocoanut palms, too, are numerous, though they do much better in the low-lands close to salt water. Four miles of down-grade are some compensation for what has seemed an endless climb, but it must be taken most carefully, for the turns are sharp, and a wheel not under good control is liable to go over the guardless road-edge in a perpendicular flight.

I reach Cayey at last, seventeen miles from Caguas as measured by cyclometer. One closely-built street, and an uninviting one at that, seems to comprise the town, but the inn presided over by Veneancio Vega is clean and attractive comparatively. At the eleven o'clock breakfast a newly-arrived Spaniard discourses eloquently and pathetically on the misfortunes of his native land, while a Venezuelan lends a sympathetic ear. The postmaster, a recent arrival from West Virginia, and the newly-appointed superintendent of schools, also an American, both totally ignorant of the language, sit wondering what the oratory is all about.

On to Aybonito in the afternoon, and a great part of the way is most tedious climbing on foot, but the beauty of the scenery is an offset. The



"THERE ARE PACK HORSES BALLASTED WITH PANNIERS."

topography is jumbled and broken beyond description, yet these mountain sides, and tops, too, are covered with fertile soil, and are nearly all under cultivation. Tobacco predominates, a vast acreage growing on slopes so steep that the marvel is how the *peones* can keep a foothold while tilling the soil or gathering the leaf. The huts of the *gibaros* perch like hawks' nests on lonely crests, and the drying-sheds below appear to stand on edge. The road is comfortably wide for ordinary purposes, but when a train of a dozen or more government carts, each drawn by four rangey mules, comes plunging down helter-skelter with brakes set, it is well for foot traveler or wheelman to flatten himself against the mountain side, or hang over the outer edge until the avalanche has passed.



LOOKING SOUTH NEAR CAYEY.



IN THE MARKET-PLACE, SAN JUAN.

And still onward and upward, principally afoot, while the sun sinks lower and lower. There are few habitations along this part of the route, but there are occasional wayfarers and road workers always ready for a word. From an approaching coach comes a hail in good plain English. The owner of the voice has lunched at Aybonito, and forgot to pay the reckoning for himself and friend. Would I take a Spanish *peso* and an American dollar, and settle with Señor Muñoz for him? The *posado* in question is opposite the telegraph office, I couldn't mistake it.

Later in the evening I find Señor Muñoz in his *sala*, and with him Captain Wheeler, of the cavalry troop stationed here.

"Is this station a comfortable one, captain? Is the climate agreeable week in and week out?" I asked. "One of the very pleasantest. We are at an altitude of three thousand feet, and it is always comfortably cool," answered the captain. But before midnight, I find it is uncomfortably cool and heavy blankets would help out tremendously. But the fleas! They are the bane of the Spanish-American countries.

Leaving Aybonito in the morning—for there is nothing to detain a tourist unless it be the old church—I wheel into Aybonito Pass. Here the Spanish forces were strongly intrenched ready to give General Wilson's column a hot reception in the late unpleasantness, but almost at the moment of attack a courier announced the protocol, and what would undoubtedly have been a fearfully

bloody fight was called off for all time.

The genius of the Spanish engineers who carried through this piece of road-building is most strikingly shown in this section of the work. The road twists and doubles upon itself here in a way that brings about an almost perpendicular overhang at points, but withal the grade is very heavy. I had been told at San Juan that it was impossible with my equipment, 88 gear and 8 inch cranks, to hold a wheel through the pass, a distance of several miles,

by back-peddalling. Steeper and steeper it gets after leaving Aybonito, until I have to zigzag as sharply as possible and to keep quite to the road edges where the tires bite better on the rougher surface. That works well for a while, but is fatiguing and it is a great relief to jump my foot onto the front tire and brake in that way until my shoe seems to be red-hot, then jump back to the pedal and resume zigzagging for a time; but once lose control in changing and the result would probably be fatal. Still anyone accustomed to hills and foot-braking can safely make the whole descent without a dismount.

Coamo comes next, twelve miles from Aybonito by road, but probably about five miles as the crow flies. There is an inn here, but one of our cavalymen strongly recommends the hotel at the Springs in preference for the noon-day breakfast. The *Baños de Coamo* are three miles out of town on a road that leads through a wide stream to be forded, and ends at a rather pretentious hotel; that is, pretentious for the West Indies—rambling, massive, low and cool.

Twenty-three miles to Ponce; no more mountain climbing, but the hills are not to be despised, and there are no considerable level stretches. The village of Juana Diaz breaks the journey with daylight already becoming pallid. At last the Rio Portugues. At this season of the year boulders and gravel are more conspicuous than water in the bed of the river, and it is easily forded, but the darkness is Egyptian, and I am hesitating to try it alone, when two *peones*

happen along. One takes my wheel and the other wades and balances me as I jump from rock to rock.

The lay-out of Ponce is totally unlike that of San Juan—perfectly flat and somewhat scattered, as there is unbounded territory to spread out over; not nearly as picturesque as the capital, but quite as large and businesslike. Due north leads a *carretera* to Adjuntas, as good as the military road. Not far out of town the foothills begin and the grades get stiffer. *Gibaros* in clean, stiffly starched, holiday attire come trooping down from the interior, for it is a holiday. I perch on the coping of one of the massive bridges, in the shade of a mango tree, and watch the procession.

Journeying on to the westward, the road follows the coast rather closely, and while it is not very bad going and the grades are easy, it is quite different from the *carretera* through the island. There is a narrow-gauge railway, too, as far as Yauco, built by French capital and equipped with quaint little locomotives, and first, second and third class cars of French construction.

Guayanilla is the only hamlet in the sixteen miles between Ponce and Yauco, and is hardly worth pausing at. As it is Good Friday the inhabitants of Yauco are mostly strolling about the plaza and patrolling the streets, giving the impression of twice its real population. Two inns, called hotels of course, give little choice of accommodations; no matter how wretchedly small and unworthy of the name a stopping-place may be, it is always a hotel.

Eight dollars for a carriage to convey self and wheel over the next nine miles of said-to-be-impassable going to Sabana Grande, is the figure that seems to be the bottom notch for that kind of service; but a call on Major Vermeuil, military commander of the district, secures passage in a government cart that is going out at 7 A. M. the next day.

These vehicles are about as heavy and clumsy as a caisson, and as uncomfortable as a springless vehicle can be; so having arrived at quarters a little ahead of time in the morning, I start

on to cover as much ground as the roads will permit on my wheel, and then to wait for the cart. The going soon becomes bad enough but not altogether impossible, so I keep in motion, sometimes afoot, and sometimes in the saddle.

The streams to be crossed one can easily ride through at this low water stage, until in the outskirts of Sabana Grande I find a depth that requires the aid of a couple of lads to push me through, while I hold my feet above it. In the village all is en fête, for it is Holy Saturday. Upon the advent of a wheelman, jogging along the main street towards the plaza, the whole populace seems to follow. There is service in the church, and I step inside for a moment, but the congregation turns to stare in a way that promptly drives me out. Outside the crowd is waiting silent and curious. As I stand considering the situation, a couple of the civil guards approach and suggest very politely that too much of a mob is gathered, the church service is being disturbed, and would I just move on!

I have given up all idea of waiting for the cart some time since, and ride along toward San German over six miles of less abominable going than I have left behind. A cheery little chap on a gamey pony keeps me company. He has been to market and carries a string of bits of meat, exposed to the sun's glare—the family fête-day dinner. His bubbling good nature and curious interest in pointing out the best going for a wheel, I have often recalled; and when he finally turns in at a *finca* gate and shouts "*Vaya con Dios*," it is like losing a friend.



THE MILITARY ROAD NEAR AYBONITO.

San German is town enough to be a military post, and to have a hotel as primitive and unsatisfactory as Porto Rico boasts of.

The fourteen miles to Mayaguez lead through the most level country yet traveled, and a strong east wind makes coasting possible. There are many carts, however, drawn by strings of cattle that promptly go into a panic, as usual. Flour, codfish, and provisions generally, are their loads, just landed by vessels from the States and being distributed inland. Won't I stop and have a *refresquito*? This from two horsemen whom I overtake near a *pulperia*. They recommend a very smooth rum with cocoanut milk, and we sit down in the midst of an amazing hodge-podge of miscellaneous merchandise, both wet and dry. The proprietor isn't going to be outdone in hospitality, and brings out a demijohn of pseudo Cognac, and a sweet liqueur. His dishevelled, pony-built little wife, produces cigarettes and lights them for us, while two naked children stand gazing. In come more swarthy fellows, and they, too, insist on doing honor to the stranger, until I begin to apprehend my finish. Yes, I'll surely come back that way; we swear eternal friendship, etc., and I finally escape in pretty fair marching order.

On past Hormigueros, where General



A WAR RELIC—AN UNEXPLODED SHELL.

Schwan's regulars, moving from Yauco to the capture of Mayaguez, scattered the Spanish troops. Suburbs of flimsy huts, made almost beautiful by the rustling palms, announce one's approach to Mayaguez, the third city of the island, and claiming to be the handsomest. The residences of the better classes, with their stuccoed walls tinted pink, blue, yellow, and pale green, are really attractive; and the central plaza with the cathedral and solid business structures and its great Columbus in bronze, appears equal to that of San Juan. The city proper, like Ponce, is back from the coast, and diminutive tram cars holding only eight people, though drawn by two mules and sporting a conductor, connect with the Playa, where crumbling old ware-houses drowse along the beach.

On Easter Sunday, after grand mass, the plaza is a brilliant spectacle, for there is much wealth here and beauty also from the Spanish-American point of view, and it is all on show and appreciated, too, by a multitude of masculine on-lookers, native and foreign. Cock-fighting, gaming, dinner-parties and in the evening a grand ball finish the day. Bull fights? no, they are of the past.

From Mayaguez to San Juan by the north coast, thus completing my circuit, the roads are bad, barring the eight miles north of Añasco, but there is railway and coach service through to the capital. Three hours by train introduces the traveler to as beautiful coast-wise tropical scenery as the Antilles can show; cocoanut groves for miles, wild bananas, too, crimson-flowered hirtella bushes, and the gay foliaged ortega, lend variety while the white surf is in plain view boiling against the jagged bluffs, and farther out the intense blue of the Caribbean.

At Aguadilla, the terminus, the mail coach is crowded, but a vehicle is available. Some stretches of deep sand en route almost finish the already exhausted horses; the druggist gets out and plies the whip most cruelly, while the driver takes the horses by the bit and drags, both yelling with picturesque energy. But we catch the train, thanks to the mail coach being a little late. Then five hours' slow steaming through monotonous levels, with occasional stops at small towns. At last San Juan. And so it ended—an experience well worth while—for once.

HUNTING THE BIG HORN

IN THE COLORADO DESERT.

By E. E. Bowles.



THE most wary and timid of all the big game animals of America is that branch of the Rocky Mountain sheep (or Big Horn) family having its habitat in

the mountains of that isolated and little-known territory designated on maps of the southwest as "The Desert of the Colorado;" a territory bounded on the east by the Colorado River, on the west by the Sierra Madre Mountains, on the north—well, by the southern line of Nevada, and on the south by the Mexican line; possibly 150 miles from east to west, and 250 from north to south.

As the coming of the white hunters, with their long-range guns, drove the Big Horns of the Rockies to the higher peaks, so the rush of the "boom" in southern California forced the sheep out into the fastnesses of the desert mountains, a literal *terra incognita*, save to prospectors and an occasional Indian. There they have remained comparatively undisturbed for years, increasing, until they are quite numerous, more plentiful than deer indeed, and as their present haunt is a waterless, treeless, barren waste of sand and rocks, there is no immediate prospect of their extinction. There are but few persons aware that in a day's ride from Los Angeles one can be in the heart of the mountain sheep country.

Some claim that the Big Horn of the Sierra Nevadas and the Rocky Mountains of the North are not so much larger than the wild sheep in the mountains of the southern desert, but as I have shot bucks, or rams, as you please, in the latter country having horns ranging from nineteen to twenty-three inches in circumference at the base, and from three to over four feet in length on the outer curve of the horn, it may be accepted as a fact that they are at least "big" enough to create an interest in their hunt and afford exciting chase.

Conceal their horns and they resemble nothing so much as an antelope, their dark gray coat of short hair shading to a light fawn, or almost white on the rump and belly. However, I believe they are heavier than an antelope; one big buck that we got last spring on a scratch shot at 250 yards, dressed over 200 pounds; this, of course, without the head or horns. They must have derived their family name from their horns, for in no other respect do they resemble a sheep more than does an elk, deer or antelope. However, in the winter season I have often found, close to the pelt, a fine, soft, short gray fur, it cannot be called a fleece, it is too fine and soft; this is in addition to their heavy coat of short straight hair.

Not only are they wary and timid, but unlike a majority of wild animals, they are devoid of curiosity. Tie your bandanna to your cleaning rod, stick it in the sand or in the crevice of a rock and then lie back and wait for their curiosity to bring them within range, and you will never see a sheep; yet this trick is often successful with antelope, but with sheep the result is similar to the experience of our little Japanese cook, whom we had taught to handle a shot-gun; on his return from a weary and unsuccessful tramp after jack-rabbits his excuse was, "No ketchum, go quick."

Mountain sheep have the keenest sight and most delicate sense of smell and hearing of any animal it has ever been my good fortune to hunt, and I have hunted almost everything edible in the wild game line, except the caribou of the North. I am not a market hunter, my experiences having been confined to the necessity of supplying the usually scanty larder of a gold miner with fresh meat; therefore, anything I write is not from the view of an expert or a dead shot, but from that of an amateur who will take up any old gun and go into the hills after anything that will furnish his camp-fire with a roast or broil. I have read of these dead shots—read of them when I was a boy in books that I never left lying about the house, but whose contents I devoured at school behind the friendly

cover of my geography. Those books told of men who, without a tremor, saw a grizzly stand upright, and

“ Watched the sway of the shoulders,
The paunch's sag and swing,”

until the monster was within eight or ten feet of them, and then “ coolly and deliberately planted a bullet in his eye.” Since those trustful and believing days of childhood hero-worship I have met his bearship on his native heath, have roused the “ grizzled monarch ” from his lair, and I now say after mature deliberation that no cinnamon, silvertip, or brown grizzly bear is going to get within 10 feet or 100 feet of me, provided always, of course, that I see him first ; but there is nothing sneaking or underhand about a grizzly bear ; he will give you a fair stand-up fight if you are looking for a fight ; the greatest fault I find in them is their extreme sensitiveness, their liability to take offense without just provocation. The report of a gunshot anywhere within the hearing of a grizzly is quite likely to cause him to hunt you up to ascertain if you were shooting at him. On the other hand, I have watched a grizzly pass within less than fifty yards of me, in an open bit of country, and all the attention he paid me was a sidelong glance which convinced him of my firm neutrality, so marked as to border on friendliness. I was not hunting bear. I patted my astuteness on its bald spot after he had passed and I had measured his nineteen-inch track. I remember once—but this is a story about sheep, not bears. However, here is a query I would put to professional hunters : Why is it when you take your shot-gun and go after quails, grouse, squirrels, or other small game, you are continually jumping deer, sheep, bears, or mountain lions, and the reverse happens when you take your rifle?

The mountains of the Desert of the Colorado are the most difficult hunting country of any I was ever in. The desert is not a level sandy plain ; it is diversified with mountain ranges from eight to ten miles apart, the intervening country being sandy valleys covered with cactus, greasewood, ironwood and wild sage. The mountain ranges have a general trend from northwest to southeast, rocky, barren and precipitous, rising almost abruptly from the sandy plain to a height of from 2,500 to 5,000 feet. Entirely devoid of soil, waterless,

treeless, with here and there, in crevices of the rocks, a bit of stunted herbage or bunch grass on which the sheep wax fat. No forest or underbrush to aid one in approaching his game unseen ; nothing but the bare, sun-burned rocks, under a brilliant sunlight and in an atmosphere so clear that with the naked eye a man may see another walking at a distance of five miles. Under such conditions to successfully stalk a Big Horn, with their sense of hearing, smell, and sight developed to such a remarkable degree, is a feat of which one may well be proud. I never did it—intentionally that is. I have “ ran onto ” bands of them with the wind blowing strong in my face, and it was then difficult to decide which was the more surprised.

The mountains are covered with bits of broken rock, which the elements have chipped from the massive formation, and one goes slipping, sliding, clattering along, and in the deathlike stillness of the desert, so absolute as to be oppressive, sound carries far. There is no southing of the wind among the trees, no song of birds nor scream of hawk nor brawl of mountain stream ; nothing but inanimate, grewsome, horrible silence, that has turned more than one poor fellow's brain, whose mummified remains we have found later, his swollen tongue protruding between his blackened lips, his clothing torn from his body in frenzy, his features terribly distorted in his last agony.

Knowing the customary haunt of the sheep you intend stalking, and with moccasins on your feet, you may be successful ; I know it has been done ; I have seen Indians do it. The grazing being sparse the sheep feed from bunch to bunch, some constantly moving, and the least sign of motion on the part of another object of that inanimate nature will arouse their suspicions. When the big buck leader tosses up his head and looks in your direction, you may be 1,000 yards away, lying prone upon your face, pasted on the rocky face of the mountain, scarce daring to breathe, but you are in for it for he will stand like a statue for possibly an hour, never taking his eyes from you while the others feed on. You may resemble the many slabs of granite lying about, but I believe that he knows there was no rock or boulder in the exact spot you are occupying when he looked a short time before.

You watch him out of the tail of your eye from under your hat brim, and oh, how you want to sneeze, or scratch, or change your position, but you dare not; in dropping to the ground probably your rifle is under you, to give no gleam of metal, and now the hammer is eating into your thigh—you must move, ever so little—but it is enough; the statue stamps its foot and whirls, facing the direction the band must go and it never looks, but goes; you see a flutter of white flags and they are gone, only the leader, standing on the highest peak on the verge of the precipice to make sure—then he is gone. But do not allow him to make sure; remain motionless

proaching water, so it is better to select a spot some distance away along their trail which is always well-defined. Let them get broadside on, pick your animal, aim at the forequarters and let drive; if you do not get it then "pump lead," pump hard and fast, you may cripple one and get it later; if one drops behind or goes in a direction independent of the band, follow it, it is your meat; you have winged it; if the band goes out of range in a bunch you may as well indulge in any expletives that your religion permits or the occasion warrants, and go back to camp. The best time to find them under such conditions, although it does savor of pot



"PASTED ON THE ROCKY FACE OF THE MOUNTAIN."

for a short while until he disappears after the band, then you may follow, possibly with better success, but more probably not.

There are a few water holes and tenijos (tanks) scattered through the mountains, but only wild sheep, Indians, and prospectors know their location. If it is fresh meat you are after the surest way of securing a supply is to post yourself within easy range of some high ridge leading to the water; they always select the highest ground. You might take station near the water, but I have also tried that without success. Sheep redouble their caution when ap-

proaching water, is between early dawn and a little after sunrise. In the winter months they generally go without water for several days, but in the summer months they usually hunt water once a day.

As an illustration of their keenness of sight and evident memory I will relate one incident. A friend of mine, Joe Davis, from Llano County, Texas, a good man with a horse, rope and gun, and a good man to have with you under any circumstances, and I, were prospecting and found a water hole in the Dos Palmas Mountains, where it was evident Big Horns had been watering for ages,

judging from the appearance of their trails. The small alkali spring was in a park-like place surrounded by mountains. This park was full of barren little knolls or hillocks from twenty to forty feet in height. About thirty feet up the side of one and commanding the water-hole, forty yards away, was a narrow shelf or bench covered with broken slabs of schist.

On this bench we erected a rude wall about four feet in height and with only two small loopholes, less than three inches in diameter, for our rifles. The cleavage of the rocks was smooth, and one flat stone on another made the wall close and firm. A few dwarfed greasewood bushes were growing around the base of the knolls, and, breaking the tops, we concealed the wall behind their red and green foliage. Then we went out on the trail one hundred yards and inspected our work; it was satisfactory; we had built blinds before, and we could only discover it by knowing its exact location. Understand that a blind was absolutely necessary, for the knolls were round and barren, save for the stunted greasewood, which afforded no more protection than would a currant bush in December.

The next morning we were behind our blind and the muzzles of our rifles in the loopholes before the dawn peeped over the curtain that night had looped up to the peak which towered above us on the right. With our backs against the rock we waited patiently for developments, and longingly fingered our pipes, but a smoke was out of the question, although the wind was in our favor. Through half-closed lids I watched the kaleidoscopic changes of the peak from pearl gray to rose, rose to pink, and from pink to silver just as Joe laid his hand on my arm. Silently he pointed up the ridge; there, a full mile away, silhouetted against the clear morning sky, was a magnificent buck. Motionless he "viewed the landscape o'er," and the prospect being evidently satisfactory he moved on, followed by one, two, three, four, five, six others from under the ridge, three ewes, two young bucks and a lamb.

On down the trail along the "hog-back" they came prancing, gamboling, and now and then stopping to nibble at some juicy bit of herbage; for half an hour we watched them, possessing our

souls in patience until they should be within range. Four hundred yards away the trail crossed a "saddle" in the ridge, hiding the quarry momentarily from our view; taking advantage of this we shifted our positions to a "ready," careful to keep the muzzles of our rifles within the loopholes.

Up they came out of the saddle, and for an instant the wary old leader stopped, looking straight at our cleverly constructed blind. Literally holding our breath, we watched him through the very narrow space in the loopholes not filled by our rifle barrels; one of the younger bucks, growing impatient, started on, but the old "boss" stamped his foot, whirled about, and the next instant they were out of sight only to reappear on the opposite side of the saddle going at full speed up the trail, and in less time than it takes to write it they had disappeared over the high ridge where we first sighted them. Silently Joe and I looked at one another; customary expletives could not meet the occasion, but as we drew out our pipes he said: "Don't that rasp you?" Then we went back to bacon and beans.

Now what frightened those sheep? It was simply impossible for them to see us behind our blind, a solid wall of rock hidden by bushes. A strong morning breeze was blowing directly from the sheep, so it was not possible for them to have winded us; several coyotes, that certainly have a keen scent, came down to the water hole, within forty yards of us, drank and played about for a time utterly oblivious of our presence. Later a huge wildcat also came and drank, rolled in the sand, then deliberately sat and made its toilet after the manner of a house cat; none of these keen-nosed animals scented us, even at that short distance, and, of course, we did not shoot at them.

The only plausible theory that I can advance is that the sheep recognized some change in the landscape, that the bushes had been moved, that yesterday or the day before none had been growing on the site of our blind; they were certainly not frightened at the presence of any other animals, for coyotes will not attack a mountain sheep unless it is disabled from wounds or age. I once witnessed a fight between a full-grown mountain lion and a big

horn buck. The lion, after repeated "jolts," crawled away bruised and whimpering, and, admiring the big horn's nerve, I allowed him to pursue his victorious way. Two or three rods farther on, in answer to his call, a ewe and lamb came down an almost precipitous bluff. It was a grand fight and I can testify was strictly "on the square."

Joe had one failing that at times was fatal to his success in bringing down his game, but only when there were a number of animals together; that failing consisted in shooting at one and watching the others at the same time. The day following our fiasco at the blind I

for he came directly toward us. His horns measured twenty-two inches in circumference. That an animal of their size can carry such horns seems almost incredible. Frequently I have seen the old bucks throw their heads back, resting their horns on their shoulders and swallow space at a terrible rate. The old story that they leap from high precipices and alight on their horns I believe to be a myth. I have chased many of them and watched for that spectacle, but in vain, although I believe they might do it without breaking their necks; but they are very sure-footed, and will go where you cannot follow, leaping and bounding from point to



A FAVORITE HAUNT OF DESERT BIG HORNS.

saw him bring down a lone lamb at 250 yards, and a few days after a ten-pronged buck deer on the run at 200 yards. However, we congratulate ourselves that we got the big buck that discovered our blind. Several days later we were going up the broad arroyo and discovered him industriously feeding on an ironwood bush in a bank about 200 yards ahead of us. We both fired, my bullet going into the bank just over his back and Joe's evidently passing between his fore legs. He leaped to the top of the bank, but Joe's second shot struck him squarely on the horn, turning him around, evidently crazing him,

point and shelf to shelf, where you cannot find a foothold.

Sportsmen may be curious as to what guns we use. Those who live in the mountains are not particular, any old gun will do; I have been using an old 44-caliber, black powder model of '73; it answers my purpose. I have taken the shot out of a 12-gauge cartridge, rounded a stick the size of a lead pencil, punched holes in a cake of soap, melted the No. 6 shot, poured it in the holes in the soap, and reloaded the cartridges with the slugs. With these I have killed both sheep and deer. I cite this only as an instance of what necessity

compels a man to do. But to take up the rifle.

The new smokeless powder, 30-30 or 30-40 models, are meeting with great favor, but I am one of those that love old friends the best. The new models are certainly good guns, but when one is after meat—I have my doubts. My objections are not those of an old comrade of mine, who said that the “drotted things killed so far that he had to salt the bullets, for fear the meat would spoil before he got to it.” Neither that of another, who feared “a thousand-yard range might strain the gun.” My objections are, that the small caliber steel or hard-pointed bullet, while it certainly penetrates, leaves such a small aperture that the wound does not bleed outwardly, making it almost impossible to trail your game, and unless struck in the spine, heart, or head, a wounded animal will sometimes go a long distance. On the other hand, the soft-pointed bullet shatters too much; it goes to the other extreme. I saw a running deer struck in the rump with one at three hundred yards, the ball coming out at the shoulders; only one ham was worth taking to camp.

There are yet numerous bands of Big Horns in the desert mountains of southern California, especially in the eastern portions of the counties of Riverside, San Diego and San Bernardino; no one hunts them save an occasional Indian or a prospector wanting a change from the everlasting bacon (Chicago quail), and he does not kill wantonly, only one for his own consumption. As an illustration that they are yet numerous I will relate one instance: Last spring two Chemihueva Indians came to my camp and wanted to buy or borrow some cartridges; they had two 44-caliber carbines, but had only nine cartridges between them. Of course, I refused them, as I was not at all anxious that they should hunt in that vicinity. They went into the Pinto mountains, three miles east of my camp, and the next night returned with the meat of seven sheep and one cartridge, and

yet an Indian is “no good” with a rifle at over 100 yards. There is not the slightest taste of mutton to the meat, and I prefer it to venison, which it very much resembles, only in my opinion it is more tender, sweeter and better flavored.

The desert has one advantage over the mountains of the north, and that is in the matter of climate; here one may sleep out of doors the year round without discomfort. Three pairs of good woolen blankets—one pair for a mattress and two for covering—together with a strip of 12-ounce or 16-ounce duck six feet wide by fifteen long, is ample bedding for the coldest winter months; in the summer—well, one may say that any bedding at all is superfluous. From November to April is the best hunting season; the other six months in the year are too hot. I have seen the thermometer in June register from 105 at midnight to 125 and 130 at noon in the shade in the coolest spot we could find about camp, and this for weeks at a time. One can have no idea of the power of the solar rays until he spends a summer on the desert. Of course, there is no humidity in the atmosphere to speak of, else man or animal could not live twenty-four hours.

If you are going into that country take burros; a wagon and team are troublesome, and one cannot get into the heart of the game country with a wagon. Take burros to pack your bedding and supplies, and another to ride, and you can go to the summit of almost all the mountain ranges, and the favorite feeding-grounds of the Big Horns. But under no circumstances enter that region without a guide; an Indian will do, and he will at the same time educate you in the mystery and delicate finesse of Big Horn stalking. The desert of the Colorado is an innocent-looking

little blank spot on the map, but on the surface of what it represents lie the bleaching bones of many men. There are correct maps of it, but they are seared on the brains of a few prospectors. You must be wary in the Colorado desert.



ABANDONED—TWO DAYS' FROM WATER.

OVERHAULING YACHTS.

HINTS FOR CORINTHIANS.*

By A. J. Kenealy.

NO matter how small a craft the yachtsman owns she will, after a winter's lay-up, require a good deal of attention before she is fit for the water; and there is no reason why a keen yachtsman who owns a tidy little craft, should not fit her out himself in his spare time. In fact, I am acquainted with many boat-owners who find nearly as much delight in getting their own vessels into proper fettle for the season's sport as they do in navigating them. There is much to be said in favor of this enterprise. The principal argument is that a man overhauling the hull of the boat which belongs to him will not be at all likely to "scamp" the work. On the contrary, it is to his interest to do the job thoroughly while he is about it, for he is improving his own property; whereas if he employs a mechanic to do it by piece work, or by the day, the task may be performed in a manner more or less perfunctory, or at any rate without the attention to minor details which the actual proprietor would be expected to bring to the task.

I would not counsel a man to attempt repairs which call for the skilled shipwright or boat-builder. The result would in all probability be a lamentable failure, and in the end a mechanic would have to be called in. But the work of cleaning, painting and varnishing a hull intrinsically sound may be accomplished by the man or boy of average intelligence and industry.

What is true about a hull is still more so of her rig. When I first went to sea on a deep-water voyage, as soon as the ship was out of soundings the crew's first duty was to undo the work of the professional rigger, stay the masts anew by shrouds and backstays, and replace the hurried botch-work of knots and splices, by seamanlike and shipshape work.

Anything in the shape of a boat may be made water-tight, no matter how leaky she may be, if treated with careful ingenuity. I would be the last

man to suggest patching and puttying up a ramshackle craft whose frames and planking are rotten. Supposing, however, that the hull is fairly sound, but through exposure to the hot sun her planks are cracked in sundry places and that in fact she leaks like a sieve, there is no reason why she should be condemned. There is a lot of good fun to be got out of a craft of this kind, if the proper repairs are made. If put in the hands of a professional boat-builder the cost would be very high, even if he could be induced to undertake the work. Here, then, is where a handy man or boy has a capital opportunity to try his hand as a craftsman. I repaired an old 18-foot boat in my younger days, when money was scarce and I had the alternative of giving up my pet diversion of sailing or making the ancient bucket tight.

This is how I went about it.

The craft in question was hauled out on the shore above high-water mark. She had been abandoned by her rightful owner, who had moved inland and left her to the tender mercies of the sun in summer and the snow in winter. For sixteen months she lay on the beach neglected. Every day I cast covetous eyes on her. I will make a clean breast of it now in my old age and confess that I had contemplated stealing her. That sin was, however, spared me, as I found her owner's address and wrote, asking if he would sell her. He replied that he would give her to me and welcome, and thus made me the happiest youth in the land.

The boat was originally a first-class little lapstreaker of good model, built of teak throughout and copper-fastened; but there were many cracks in her planks and most of her fastenings were loose, and in a general way she might be described as "nail-sick" all over. With the help of a couple of chums I placed her on chocks and shored her up on an even keel, supporting her well so that she should not suffer from any

*A number of additional valuable and money-saving hints on overhauling a boat may be found in Captain Kenealy's "Boat Sailing, Fair Weather and Foul," published by OUTING.

unequal strain, when I filled her later on with water. She was very dirty inside, and I remember it took me the greater part of a day to thoroughly clean her with soap, hot water, and a scrubbing brush. Then I put the plug in and started to fill her up with water. Although I had plenty of help from the village boys, who were never so joyous as when pottering about a boat, it took a long time to fill her, for the water poured out of her like the streams from a shower-bath. But her dry and thirsty planks soon began to swell a little and the leaks to diminish. I kept her as full of water as possible for two or three days, marking with chalk every leak that appeared. I may remark that the chocks on which her keel was raised were high enough for me to crawl completely under her bottom and get at every part of her. Her hull, which originally had been varnished to show the grain of the natural wood, was pretty well checkered with chalk-marks by the time I had finished. Then I let the water drain out of her, and waited until she was dried thoroughly by wind and sun.

Meanwhile I bought a lot of copper nails of the requisite length and rooves to match, with the use of which I had become thoroughly familiar from watching the men in the boat-shop hard by. Then I began operations, aided by an apprentice from the boatbuilder's establishment whom I induced, by the proffer of pocket money, to turn out of his bed at dawn and lend me a hand till the clang of the bell summoned him to his daily toil. We replaced all the rivets that had worked very loose, with new ones of a larger size, and drove an additional nail between every two originally driven. The old nails, which were only a little slack, I hardened with a few taps of the hammer from the inside, while Toby, the afore-mentioned apprentice, "held on" against the heads of the nails with another hammer on the outside. This was slow and tedious work, but it paid in the long run, for it made the boat almost as good as new, her frames, as I have already mentioned, being in capital condition.

My next operation was to borrow a pitch-kettle from the boat-shop and to put in it a pound of pitch and a gallon of North Carolina tar. Kindling a fire under it I let it boil until the pitch

had melted, stirring it constantly. This mixture I applied boiling hot to the inside of the boat with a paint-brush, filling every crevice and ledge up to the level of the underside of the thwarts. It was astonishing what a quantity of this composition the planks absorbed. I put only half a ladleful of the tar into my paint-pot at a time, so that it should not stand long enough to cool, replenishing every few minutes from the boiling kettle. Tar when at the boiling point is comparatively thin, and has superior penetrative qualities, so it can be worked with the point of the brush into every crevice, no matter how minute. When it hardens it forms a watertight seam which possesses, from the nature of its ingredients, a certain amount of elasticity.

There were a number of sun-cracks in the planking, which I filled with fish glue, run in hot from the outside. This composition dries very hard and does not crack. My next task was to sand-paper the outside, smoothing the very rough places with pumice-stone after wetting them well. I ached all over by the time this process was completed, but I got her as smooth as glass. Then I gave her outside a couple of good coats of raw linseed oil applied on a hot day. As a finish, not caring to waste money on varnish, I gave her a final coat of boiled linseed oil, in which a generous lump of rosin had been melted. This is the mixture used from time immemorial by the Dutch on the bottoms and topsides of their galliots, and it wears well and looks well, resisting the action of both fresh and salt water. I may say that this method of making my boat watertight was economical and successful. The example may be followed with similar results by anybody who owns a leaky lapstreak craft.

Another method, as practised on a St. Lawrence skiff that was badly checked and rotten in places, is thus described by a veteran boatman who made the successful experiment: "The boat was of lapstreak construction, and many of the seams had opened. I went entirely over the boat, first closing the seams as much as possible by drawing together with clout-nails. Next, where there were cracks through the 3-16-inch planking, I cleaned the painted surface, and where the paint had blistered I removed all of it by scraping. When the sur-

face was in proper condition I cut a strip of eight-ounce duck of a length and width to cover the crack (generally $\frac{3}{4}$ -inch was wide enough) and smeared one side, by means of a stick, with liquid glue. The canvas was applied to the crack and pressed down, and the glue-stick drawn over the raveled ends from the center outward, to make them adhere closely to the boat. Then the canvas and surrounding wood were brushed over with enamel paint. The painting must be done before the glue sets, as otherwise the canvas is apt to warp. Open cracks $\frac{1}{8}$ inch wide were covered in this manner, and also cracks at the butts of the strakes. After all of the cracks were treated I gave the boat two good coats of paint over all, and the result was a comparatively smooth surface, and one that was absolutely watertight." The veteran very truly adds that an old boat repaired in this way will not stand any rough usage, and the patches are not proof against being dragged over rocks, or even a sand-beach; but by a little labor a boat that is practically worthless may be so made serviceable for an indefinite time.

By either of the methods mentioned above a lapstreak boat may be made tight as a bottle. A carvel-built craft—that is, one with the planks flush, edge and edge, and the seams between calked and payed—may generally be made tight by recalking her with threads of cotton prepared for that purpose and sold by ship-chandlers, driving the cotton well home with iron and mallet, and afterward puttying up the seams. Care should be taken, however, not to put the cotton in too tight, or drive it right through the seam. Serious damage has often been done to a boat in the way of increasing her leakiness by too hard calking. Or the boat's hull may be completely covered with light duck nailed on with copper tacks, and afterward well painted. This, however, is rather difficult for a greenhorn to accomplish so as to make a neat fit of it; but I have seen several boats repaired and renovated in this manner by young men gifted with ingenuity, and a great deal of patience. I may say that the result, if the work is well done, is worth the pains thereon expended.

Rowboats, sailboats, and launches propelled by any kind of power may have their hulls treated after one of these

fashions, with quite satisfactory results.

If the owner does not think he is sufficiently handy to undertake the stopping of leaks he can, at any rate, paint and varnish his craft. To paint a boat outside or inside a perfectly smooth surface is necessary, and to obtain this all rough spots should be smoothed with pumice-stone and sand-paper. Enamel paint should be used above the water-line, and the bottom may be painted with any one of the excellent compositions now in the market, which prevent grass and barnacles from flourishing too luxuriantly on the underbodies of boats.

The interior of the boat, after being thoroughly washed and scrubbed, should also have a coat or even two coats of enamel paint, as this composition is lasting and wears three times as long as the ordinary preparation of white lead, oil, turpentine, and pigment. One thing, however, is worth remembering. Never use washing soda or boiling water to clean wood covered with enamel paint. Rub it with a sponge or flannel cloth dipped in lukewarm water and a little soap. For protecting and beautifying natural wood above deck or below, use a good brand of spar varnish. This will resist the damp, salt air of the ocean, or the more penetrating moisture of freshwater lakes and rivers, far better than the higher grade of varnish used for the indoor decoration of dwelling houses, which, when it gets damp, acquires a plum-like bloom on its surface by no means beautiful.

Mr. W. Baden-Powell, than whom there is no better authority, says very truly, that there is no more dangerous time in their lives for the spars of canoes than when stowed away in a boat-house roof for the damp winter's rest. Bamboo spars are more liable to suffer than pine, or solid spruce, but each and all are in danger of splitting or kinking, especially so in the case of built spars, if glued up, instead of screw-built. With such convenient lengths as are found in canoe spars, there is no excuse for leaving them in damp boat-houses, as they can be stacked in a room corner, on end, and the sails and rigging in drawers or boxes. In this way each item of rigging can be overhauled, mended, improved, and set in order for the coming year just as convenient spare time offers.



The Luck of Shadow Brook

By L. C. Howe.

APRIL had come, with all its soft witcheries. Blue skies, sometimes veiled by sudden clouds, the damp, fragrant odors of the soil, the soft haze in the woodlands, the splashing of the overflowing brooks, the silver gleam of the brook trout—this is what April means to the angler. I had dreamed, in my great arm-chair beside the open fire through many a winter evening, of just these days. Often I had spent long delightful hours fingering my rods and reels, or looking over my notes of fishing trips in years gone by. Many a time had I sat with closed eyes, holding my rod in hand, pretending, just as in those long ago boyhood days, that I was off by some well-known stream, sitting on a mossy bank and listening to the splash of the ripples against the stones.

One evening towards the middle of April, as I sat gently touching the polished reel and lancewood rod, a telegram was brought to me, which contained the following delightful invitation:

"The red gods call us out. Come Friday for a week. The Laird is here. We want Taffy." Little Billee.

We three, Billy MacIntosh, Charlie Lord and I, had been chums since we had all made mud pies together. We had all been at Yale during the Trilby craze, and it was most natural that the other fellows should have seized upon the similarity in the names of the other two, and dubbed me Taffy.

Billee was fortunate enough to own a little shooting lodge, not a hundred miles away, that was as convenient to the trout streams as to the preserves, and we had spent many a week together each spring and fall, cementing a triple friendship that grew stronger as time went by.

The one thing we all a little dreaded was the thought that some time some one of our number would do the extremely foolish thing—fall in love, and try to add a fourth power to our triple alliance. Matters had once gone so far indeed while we were in college, that Charlie Lord had proposed we all take the vow of celibacy. That was, however, just after the girl he had taken to Junior Prom. had announced her engagement to another fellow.

For the last two or three years, with each following his chosen profession in separate towns, we had seen less of each other. Three or four times a year, however, we managed to get together, if only for a few days, and always went directly back to where we left off the time before. Never yet had the "not impossible she" appeared on the horizon. Of course we were not proverbial women haters. We knew plenty of nice girls who were all very well in their place, but when we, the Laird, Little Billee and Taffy got together, we wanted no intruders in petticoats. Therefore I was somewhat surprised and disappointed the very first evening, when I reached the lodge, by something Little Billee said.

Comfortably seated around the big open fire, for the evenings were still cool, we were apparently settled for an old-time talk, and clouds of tobacco smoke floated up to the bare rafters from three pipes, when Billee cleared his throat several times, in an embarrassed way; then rose and stretched himself, saying in a painfully off-hand manner:

"By the way, Taffy, I—er—there are some people staying over at the Bradfords' that I think we all ought to go and see. They are having a house party, and Sam Browning's sister is there. You remember Sam Browning?" in a very animated way.

I grunted grouchily.

"Well, Sam, you know, er—wanted me—us to call—only civil thing you know. They are quite decent sort of people. Don't you think you would like to come?"

"Guess I'll go along," said the Laird, before I could answer. "There is a girl I know too, there, and we have got to be decent."

There was a deep flush under the Laird's tan that did not escape me. I saw trouble ahead.

"Guess I'll stay here," I said, blowing rings meditatively to the ceiling; "I am tired, and I'll turn in early. Don't mind me."—I could have sworn there was a look of relief on both their frank, flushed faces.

"All right," said Billee, as he disappeared into his bedroom with alacrity.

I could hear him whistling a coon song, as he banged drawers shut, and slammed brushes down. He was gone a good half hour, and when he came out was still flushed from his struggle with a refractory necktie. I had never known the Laird and Billee to wear anything but sweaters and old golf suits about the lodge. We never pretended to take decent things down there, but when they reappeared they both were in immaculate golf suits, fresh from a London tailor, pink negligé shirts and high collars. I would as soon have expected to see a dress suit in the heart of the wilderness.

"Well, you chaps are sporty," I said, jeeringly; "I did not bring any such togs down with me. Think I'd better telegraph for my evening clothes. I came down to fish, not to see a lot of girls."

"Oh, shut up," said Billee, coming over and rumpling my hair in his old time way, but keeping at a safe distance when I tried to reciprocate in kind.

"Good-bye," they called out, as they slammed the door behind them, and I heard them rustle thro' the dead leaves that still lay in the hollows of the woods.

Although I sat smoking and musing until late, they did not return, and at last, thoroughly sleepy, I turned in at midnight.

At breakfast nothing was said about the house party at the Bradfords', but I noticed several suggestive symptoms. However, I did not intend to lay it up against them.

"Where are we going to fish to-day?" I asked, cheerfully.

"You know it's very much better to go in different directions," said Billee, coming back with a start from a castle in Spain.

"The trout don't run very well this year," he added, "and so we had better divide, Taffy. You might try Shadow Brook up, and the Laird go down, and I'll go over to the Wannawasket."

"All right," I said, though I did not like the idea of his speaking so condescendingly to me, who had fished with him every year since we had used our first bent pins. And shortly afterward we all set out on our separate ways.

It was still early; the air was crisp and cool, and laden with fresh sweet spring scents. The moss and pine needles made a soft carpet under my feet; the feathery boughs above me swayed in the morning breeze with a musical murmur. I forgot all the troubles and worries of the city, and felt very near to Nature.

When I came out of the woods, I stopped a moment to take my bearings. The meadows were blue-white with houstonia, as if powdered with snow; the dew still hung in drops from the tips of the slender grasses, and far off on the horizon was a dim blue line of mountains. Across the meadows I walked slowly, taking long breaths of the pure air, and wondering why I had chosen law as my profession, and New York as my home. I had almost decided that the life of a farmer or an angler was more profitable after all, when I heard the low musical ripple of the brook, just beyond a border of bushes and undergrowth. With all the ecstasy a true follower of Izaak Walton feels, when for the first time in the season he hears that low music, I broke through the bushes and found myself on the bank of the stream of which I had dreamed so many times during the winter. It was an old favorite of mine; one known since boyhood days, when I had landed my first speckled beauty not far from this very spot. I knew all the bends and turns, and the deep still pools, where one or two old and wary patriarchs of the trout tribe lay hidden.

Quickly setting up my rod, I sent a dainty brown hackle fluttering into a place where I felt positive a fine old trout lay motionless under the ripples.



"THERE WAS A SILVERY GLEAM, AND I HAD HIM FAST CAUGHT."

There was the flitting of a shadow—a silvery gleam—and I had him fast caught. How I played that trout! Only an angler knows the exhilaration of it. Here, there, the shadow darted untired, never giving up hope that he could escape the cruel hook hidden in the dainty morsel, which his epicurean taste could not resist. It was many minutes before I landed the beauty and sat down hot, breathless and happy to weigh him. How his silver sides gleamed, and the red spots shone as he hung glittering from the scales! He lacked only one ounce of a pound.

I fished the brook up, until noon, wading through the brown, shadowy water, contented and happy, even though I did not feel the sudden quick rise I expected every moment. It was a joy to be alive that morning; just to breathe the sweet perfume of the spring flowers and the damp earthy smell of the woods.

Suddenly I turned a sharp bend and stopped—motionless. On the bank stood a slight graceful girl of perhaps seventeen. Her cheeks were flushed and her hat was pushed back from one of the sweetest, most piquant faces I had ever seen. She stood there poised, alert, her slender rod bending under the frantic efforts of a trout, that I could see, as it leaped once from the water, was a good pounder. Finally, with a deft motion of the wrist, she landed him at her feet.

"Bravo!" I exclaimed, "Bravo!" I was almost as excited as the girl. She looked down stream, saw me, and then for a moment stood looking like a startled deer, ready to dart away at the slightest motion on my part.

"I beg your pardon," I said, taking off my cap, and wading toward her.

"Look out for that pool," she cried. I had forgotten all about the deep hollow just there, and plunged forward suddenly, falling flat most ignominiously. When I arose, dripping and chagrined, she looked distressed, but there was a twinkle in her eye, and she was shaking with constrained laughter.

"I am so sorry," she said, walking down the bank toward me. She had forgotten her shyness, and was as simple and natural as a boy, as she reached out a hand to me, struggling up the steep, slippery edge.

"It was stupid of me," I said. "I ought to have remembered it was there,

but I was so taken up with that superb trout you've got. You landed him well."

"Isn't he great?" she said, going over to where he lay, and touching him lovingly. Her eyes sparkled, and the color mounted into her cheeks again. Her hat had fallen off, and her curly brown hair fell about her face.

"I have had my eye on him for a long time," she went on, "but I never got very near him before. You see he lived in the dark pool under the roots of that old oak tree. The boys have wanted him all this season, and now how envious they will be. Have you had any luck?"

"Only one," I said, opening my creel, and showing her my prize. Her brown eyes grew large. "O, tell me," she asked eagerly, "where you got him. I'm sure—yes"—she touched him daintily with one little forefinger—"yes, that is he. Did you get him down below, by the old sycamore tree at the shad-bush turn?"

"Yes," I said. "Do you call it that, too? Perhaps you live near here?"

Until then I had not thought of her having a human habitation like other mortals. She was so like a wood nymph, that only a hollow oak tree seemed an appropriate dwelling.

"No," she answered. "But I am staying at the Bradfords'. Perhaps," she said, inquiringly, "you know them? I am sure I know who you are. Aren't you the friend visiting Mr. McIntosh over at the lodge?"

"Yes," I answered, looking meditatively at the sweet, flushed face before me. If this was a specimen of the girls at the Bradfords', I did not blame the Laird and Little Billee for going over. "Yes, I came yesterday; and," I added, "you know Charlie Lord and Little Billee?"

"O yes," she answered, with a ripple of laughter. "I should think I might; I see them every day. Sometimes three times a day. They haunt our house, you know."

A queer little feeling of jealousy stole over me. It seemed no wonder they "haunted" Elmwood.

"Of course, though, I don't see very much of them," she explained, hastily. "But then you know all about it, for it has been going on so long."

I looked puzzled. "Has it been going on long?" I asked lamely, trying not to show how ignorant I was.

"Well, Little Billee has been half engaged to Edna, you know, ever since last winter. Mr. Lord has known Janet all his life, but he has only been devoted to her since he came down here. It's catching, I think."

"Yes, I think it *is* catching," I said slowly. Then I felt foolish and knew that I had turned red, but she did not appear to notice.

"Let us sit down," she said, seating herself on the bank, and drawing her creel towards her. "I have some sandwiches here and I am starved; aren't you?"

"Yes," I said, "gladly, willingly; I am just that—starved. It's hours since I had breakfast."

She drew out a package of dainty luncheon, and we sat there like two children, devouring it.

The opposite bank was low and starred with violets and blue forget-me-nots; the pines looked dark against the red and brown haze of the budding maples and elms; the shadows on the distant hills were soft and purple. There was no sound but the nature music—the song of the birds, the low murmur of the winds in the pines, and the ripple of the brook over its stony bed.

There we sat till far into the afternoon, and I told her all about the Laird, and Little Billee, and myself, and she confided in me that she felt very lonely, as she was always considered a little girl, and left out of the fun of the older ones; and I promised her that I would be her friend and would come over to see her whenever the Laird and Billee went to see the other girls.

When the shadows grew long and a damp, cool smell arose, and the birds began to twitter, and a fresh breeze blew out of the west, we started homeward. As we entered the grove of elms that surrounded the Bradfords' country house, we saw two figures in the path walking slowly and talking earnestly.

"There are Little Billee and Edna now," said she; "let us take this short cut, so they won't see us."

As we emerged suddenly on the lawn I saw the Laird standing on the veranda steps, holding the hand of a tall, pretty girl, who stood above him. As she saw us she drew her hand away and ran into the house. The Laird strolled off in the opposite direction, unaware of my presence.

When we three met at supper at the lodge we were all a little silent and thoughtful. Fishing had been bad, the Laird having only two little ones, while Billee had none. However, as Billee said, fishing was not everything in life; he enjoyed going out and communing with nature; at which I choked, and I saw the Laird turn his honest gray eyes on his friend, with a twinkle in them. But we were all silent.

That evening I decided with outward reluctance, but inward eagerness, to call on the Bradfords. I fancied that the Laird and Billee were not over cordial in their invitation, but I was determined to go. However, the greeting I received from Mrs. Bradford and my little friend of the woods more than made up for it.

"When Dorothy told me about meeting you," Mrs. Cabot said, "I was positive you could be none other than the son of my old friend, Eunice Carew. I am perfectly delighted to see you. I can't realize that Eunice could possibly have such a great broad-shouldered son." She held me off at arm's length and looked at me. "You have her eyes and hair," she said; "it is like seeing her, after all these years."

Then she talked to me for an hour about their old school-days together, while I submitted with great docility, for Dorothy was sitting opposite on a low chair, smiling at me sometimes and watching me from under her long lashes and blushing, when I caught her at it. The others, meanwhile, wandered out to the piazza and I saw no more of them until we left.

"You were very good to Dorothy this morning," said Mrs. Cabot, as I was saying good-bye to her. "She is such a child that we let her run about by herself rather more than we ought. I was quite shocked at first, when she told me how you fished together all afternoon, but when I discovered that you were Eunice Carew's son I was very glad. You must come over and see us again soon, Jack—you will let me call you that, won't you?"

"Nothing would please me more, Mrs. Cabot," I said warmly. "And may I come and take Miss Dorothy fishing some time? She is a great angler, and can give me points, I know."

"You are very good, Jack," she answered; "it would be a great pleasure

to Dorothy, I am sure. She is really very lonely here. The others are older, and are off by themselves more or less." She cast an amused glance at Billee and Charlie and the two girls in earnest conversation at the other end of the piazza.

"Hope you were not bored to death," said the Laird, as we tramped back in the starlight. "You got captured by Mrs. Cabot and young Dorothy. I know how you hate girls, and especially kids like that. I am awfully sorry."

"Oh, I quite enjoyed myself," I replied, magnanimously. "I found that Mrs. Cabot was an old friend of mother's, so we had a lot to say to each other. I didn't mind a bit. I did not see much of the other girls, to be sure; they seemed to be very well looked after. For sworn women-haters you fellows are doing pretty well."

"Oh, you see we have to be decent to them," explained Billee, weakly. "We have always known them more or less, and Sam—you know——"

"Oh, yes, I understand, perfectly," I said. "They really ought to appreciate it, and Sam, too, for I know what a sacrifice it is on your part." Charlie glanced at me, furtively, but the dim light hid the wicked look in my eyes, I hope.

The week we had planned to spend at the lodge lengthened into two, by common consent. The fishing, we all agreed, was so unusually good that we could not afford to miss it, tho' we never had much to show for it in our creels when we came home.

Almost every day, after letting the Laird and Little Billee have a good start of me, I stopped for Dorothy, and together we fished all the brooks within a radius of several miles. Dorothy was really a very expert angler. She knew every brook thoroughly, and was personally acquainted with every red-god in the neighborhood. She very soon had me fast caught, with a sharp hook, straight through my heart, but of this she was all unconscious. She was as unconcerned and natural in her manner as a boy, and was the best sort of a comrade. There was not a trace of affectation or self-consciousness—the two traits I had always associated with girls. She combined all the sterling qualities of a man, with a certain trustful little manner that won me completely.

But all good things must come to an end, and at last I found myself setting out in the fresh early morning with Dorothy for our last fish together. We had decided to go back to Shadow Brook, where we had met a fortnight before. There was one patriarchal trout lying in a certain hole under some tree roots, that Dorothy was determined not to give up. She had angled for him until she was almost discouraged, but she hoped on this last day to propitiate the gods to such an extent that they would send her good fortune.

As we tramped along together over the dewy grass we both grew unusually silent. Brushing under some low-hanging boughs which showered us with glistening drops left from last night's rain, a branch caught in Dorothy's hair, and as I stooped to disentangle it, there were drops on her cheek which I knew had not come from the rain-drenched branch.

"Dorothy, are you sorry to have me go?" I whispered, bending over her. But she turned away.

"Of course I'm sorry," she said, raising her hands to rearrange some locks that had been disarranged by the branch. "How that bough did pull!—I felt like Absalom for a minute. Wasn't it Absalom who was caught by his hair? I know just how uncomfortable he must have felt. Come on, Taffy, let's hurry down to the brook before any of the others get there."

She talked rapidly, and apparently was not in sentimental mood; so, heaving a sigh from the bottom of a love-lorn heart, I picked up our rods and strode on. I wished that the sun would not shine so brightly, nor the flowers bloom so fair. I was in the mood when an easterly storm would have been balm to my troubled spirits. However, when the ripple of the brook broke the morning's stillness, we both ran, and stopped, flushed and breathless, on the fern-grown bank.

How fresh and beautiful everything was! The brook, filled by last night's rain, rushed and babbled over the stones. We were at the shad-bush turn, and above our heads stretched the gnarled white branches of the sycamore tree. Here was the haunt of our prey. On that day, when first I had met Dorothy, I had caught one of the two large trout that inhabited this particular spot,

and now one of us must land the other.

Dorothy coolly put up her rod, and, after careful study, selected a dainty Parmachenee Belle. "We must cast together," she said, "to be fair. I'll wait. But do hurry."

"After you, your ladyship," I said; "I won't be ready for a minute."

She was flushed with excitement; her hair had tumbled down about her face in rippling waves; her eyes sparkled and danced, and the color came and went in her animated face.

"Hurry, hurry," she said, stamping her little foot. "We must cast together, and I'm dying to begin."

Hastily fastening on a red spinner I said, "one, two, three," and then watched her as she cast. Lithe, graceful as a young sapling, she stood; with a motion of her wrist the line flew in curves and the bright-colored fly dropped lightly just over the hole, under the opposite bank. Mine was only a second later in striking the water. Almost instantly there was a gleam, and first her fly, and then mine, disappeared from sight.

"I've got him," she said, almost dancing about with delight, yet cool enough to manage her line with perfect skill.

"I'm sure I have him," I said. Then we both laughed. "That old beast of a trout has swallowed both flies," I cried. "He will break one line surely. *You* play him. I abdicate in your favor, my queen."

"No, no, you may have him," she said graciously, and so we quarreled.

Meanwhile his lordship was plunging about, threatening every moment to break one or both of the lines. He was even larger than we had supposed. In fact I, who had heard extraordinary tales about his size and age, had always looked on him as a myth. Now I knew that my suspicious nature was to be undeservedly rewarded by a glimpse, at least, of this monster. For a glimpse was all I ever expected; that one or both of our lines would break I was confident. With a gleam and a flash he darted and plunged from side to side. Now he almost reached his retreat under the shadow of the tree roots and again he made straight for our side of the stream, as though he would spring to our very feet.

I looked at Dorothy for one little second. My own pleasure in the excite-

ment of the moment was doubled by her look. Her dark eyes, brilliant, sparkling, did not let a motion of the trout escape. The color mounted high in her cheeks and her white teeth bit her lower lip.

Fortune favored us, for at last, worn out, exhausted, that trout floated over toward us and Dorothy landed him. We were both speechless for a moment, and then we brought out the scales. Two ounces more than two pounds he weighed, and we shook hands across his gleaming, spotted sides.

Then we sat down on the moss to rest, and talked it over. We had just decided that it would be the nicest thing in the world to spend the rest of our lives fishing together, when we heard sounds which caused us to stop suddenly. Dorothy tried to draw her hand away, but I held it firm, clasped in both of mine. Two people were coming through the ferns and low underbrush. But the rustling of the dead leaves and the crackling of the dry twigs did not drown their words.

"Next year when the fishing season comes round," I heard Charlie say, "we will have a house-party at the lodge; Edna and Billee, and you and I, dear. We must have a double wedding as Edna proposed. I am only sorry for poor old Taffy. You know he quite troubles me. He will feel so left out in the cold."

"You needn't trouble about me, Charlie," I said, rising in their path, and drawing Dorothy's hand through my arm. "You'll have to ask Dorothy and me to your house-party, or else we will come without an invitation; and as for the wedding, it will have to be a triple one."

To say that astonishment was depicted on the Laird's face is expressing it very mildly. But he soon recovered himself, shook hands most cordially and turned to announce the news to Edna and Billee, who were close behind them.

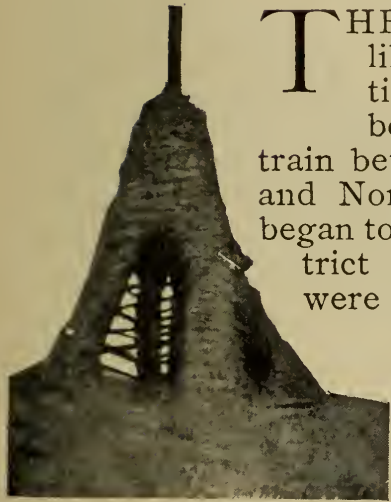
Then we all sat there on the mossy bank and ate our lunch, and afterward, as we settled ourselves to talk over the important turn in our affairs, Dorothy filled her cup with sparkling water from the brook, and sprang to her feet.

"Here's to Shadow Brook," she said, with flashing eyes. "And to angling, the greatest sport in the world." And we all drank standing.

A WINTER ASCENT OF TAHAWUS.

By C. Grant La Farge.

Illustrated from Photos by the Author.



THE SIGNAL POLE.

THERE is nothing like the fascination of a map. We bought one on the train between Saratoga and North Creek, and began to look up the district for which we were bound. The investigation

showed that if we should go up as high as to the camp on Lake Colden, which there

was some

talk of doing, we should be right in the midst of whatever the Adirondack region has best to show in the way of peaks—among them Mount Marcy, as the map calls it, though I think it should still bear its old Indian name of Tahawus, “The Cloud-Piercer.” Neither Pinchot nor I knew the country; he was going to look at the timber on the McIntyre Iron Company’s tract, and I, because I wanted some fresh air and a chance to use the old snowshoes that had been laid away for three years since my last Winter caribou hunt in Quebec.

So our speculations concerning the cluster of hills among which we expected to tramp for a week, quite naturally resulted in a query as to the practicability of our making the ascent of Tahawus on snowshoes. Oh, yes, it could be done—there was indeed no great rush of tourists to the summit in Winter—but from Lake Colden it was only some five miles to the top, and if we got a good, clear, still day we ought to have no difficulty. We were warned though that such weather was rare on the mountain tops, and that any other might be troublesome. On the whole the impression conveyed was that we might try it if we wished, but that it would be pleasanter to let it wait, say until June. So we then and there resolved to go up to the camp on Lake Colden as soon as possible—as for Tahawus, we allowed that project to subside

into a sort of mild joke; each of us, I think, quite convinced that the other was not going to let him fail to have a try at it.

There was not a great deal of snow at North Creek; enough to whiten the landscape and make splendid sleighing, but it did not look as though we would need snow-shoes to get about with. The drive to the club-house is long, though—twenty-eight miles—and rises about 1,000 feet, and although the greater part of the way is through open country, there was a gradual and perceptible increase in the wintry covering, so that at the end of the day’s journey we found good snow-shoeing conditions—fairly deep snow, sharp cold and a magnificent country.

In the morning the prospect upon which we looked forth gave good promise that our anticipations were to be realized. Before us the land fell away in a broad sweep to the winding course of the river below—the upper reaches of the Hudson River—here a brawling mountain stream, silent now beneath the ice and snow. Beyond the river rose a long slope of hill, and to the north and northwest the view was closed by the swelling masses of the tallest peaks: Colden, McIntyre, Wallface, Henderson, and Santanoni, first land upon this continent to emerge from the primeval waste of waters. Up the great valley which stretched away for miles until it lost itself within the bosom of the crowding hills, was the dense forest that once clothed all this land, and in its depths we knew that we should find the real winter wilderness. The glorious sunshine of a perfect winter day, clear and still, was over all; the brilliant purity of the snow; the gray and brown of the bare bushes in the river-bottom, making patterns of exquisite delicacy upon the white surface; the strong, sharp green of the evergreens and the soft, plume-like tops of the hardwood trees among them; the many blues of the mountains tipped with ethereal white.

We spent the day tramping about the neighborhood to get used again to the

old work ; as evening fell we found ourselves upon the river. The sun had set ; the sky was flushed with the rosy after-glow and in it floated a few streaks of violet clouds with golden edges ; the expanse of snow upon the river and the bottoms lay blue and cold. Our eyes turned to the north where the twin snow-capped peaks of McIntyre still caught the last light of the sun and shone like two fire-lit gems ; below them the deep purple hollow in which, seventeen miles away, lay the lake from which rose the Tahawus trail. That mountain itself, though the highest of them all, was hidden by the intervening heights. I knew, as we crunched our way homeward through the twilight and the gathering cold, that not to stand upon its lofty summit and survey the splendid panorama was a mistake not to be made.

The next morning was calm, but the snow fell heavily in great soft flakes, and we drove over the last ten miles of road to the Upper Works. It was heavy going ; the road wound around the base of the hills through the deep woods ; the snow piled itself more and more upon the limbs of the trees, and the forest depths grew ever whiter with the burden, and held forth a silent invitation to plunge into their dim recesses, away from the care and turmoil of the rushing world outside.

The day after, we set out for Colden ; it had stopped snowing, and was turning cold, with a rising wind. The sunlight was pale and the sky not blue, but a sort of hard grayish white, though without definite clouds. I carried nothing but my camera strapped on my back, the guides whom our kind host had most bountifully provided having gone ahead with all our supplies ; there was no attempt to do any camping upon so short a trip. After we had passed through the cleared area about the old deserted village of Adirondack, the way led for the most part through quite heavy timber, so that we did not feel the force of the wind. There were fine glimpses of steep forest-clad hillsides along the trail leading ever upward, and the snow lay deep upon the trees on every hand, but all distant view was obscured by the fine drift with which the upper air was filled.

Our progress was slow, for the woods through which we were passing were of

great interest to the Forester, and we stopped frequently to make photographs of characteristic growth.

With these many pauses the day was well spent when we mounted the last rise and came upon the Flowed Land. We were now at an altitude of 2,745 feet, nearly a thousand feet above the point we had left in the morning, and over the open space ahead the winter gale burst full upon us. Across the level reach of the Flowed Land loomed on the right the ghostly mass of Mount Colden, the great scars of its avalanches just distinguished through the gray veil of swirling, frozen snow. Nearer, upon the left, was a curved wall of low cliffs, topped by the sombre forest. What few faint vestiges of snow-shoe tracks remained in the drifting surface led between the two, and in this direction we went, guided more by the obvious lay of the land than by any trail, for this had soon disappeared completely. A few wide circles in the lee of the woods at the north end soon found it again, though, and a short walk through the spruce brought us to Lake Colden. Somewhere upon the farther shore, nestling under the base of McIntyre, was, we supposed, the camp ; but we could see no sign of it whatever. Growing darkness and the driving clouds of snow-dust made it impossible to have aught but a sense of the steep mountain walls rising close about us in the gloom, but that sense was almost overwhelming of the remoter heights that keep their loneliness inviolate even in this little circumscribed wilderness. No wonder that to the Indians of old the pass just over beyond us was the abode of the Great Spirit, and that those of them dwelling near at hand were the guardians of the sacred spot, and therefore secure from the depredations of their ferocious neighbors.

How cold it was we had no other means of knowing than by comparison with our previous experiences, but though these did not suffice to determine degrees of temperature they left no doubt that the night was to be one of intense severity. We crossed the lake, and found the little cabin, concealed among the overspreading trees. Buried deep in curling drifts, it was lit by a roaring fire in the broad chimney, and once within, little cared we for the howling wind outside, but fell heavily



MOUNT COLDEN FROM THE FLOWED LANDS, AFTER THE STORM.

upon the hot supper in a way which you have got to go to the woods to know. Then we discussed the next day's plans. As well as I can remember, there was no word of climbing Tahawus—in fact, the conditions of weather seemed to preclude the attempt—but our canvass of the surroundings in every direction indicated that we should take the Tahawus trail, to see those woods still untouched by the axe, of which we had heard, and through which led that trail to the top of the mountain. Upon this decision we slept.

In the morning the gale was still raging, and the cold bitter; the sun shining faintly through the minute snow crystals with which the air was laden and the sky whitened. We set out betimes with two guides, who knew the trail, and at the lower end of the lake looked back upon the tumbled mass of Mt. McIntyre. We could see its white-capped summit, more than two thousand feet above us, though but as in a haze, which at moments became so dense as to conceal it almost entirely. The lower slopes, clothed with evergreens, were hoary with the snow piled thick upon the limbs of all the countless trees.

The trail followed the ravine of the little Opalescent River and plunged at once into the unbroken dense timber. It was tolerably rough, and the snow was both deep and soft, making heavy walking; it lay thick upon the rugged

bowlders in the bed of the stream, softening their harsh outlines, and upon the drooping branches of the trees crowded close on either side. We were out of the wind in the forest cover, and could enjoy now the exhilarating purity of the air, the frosty aroma of the balsams. And this is worth remembering about the winter woodland: that though out in the open spaces, the lakes and clearings, cold winds and drifting snow may make it seem that inside four good walls alone is comfort to be found and escape from the inclemency of such a season, yet once within the shelter of the great woods and all is changed. The immaculate beauty of the snow itself and its many wonderful forms; the hushed silence; the many records of the feet of passing animals and of birds, which reveal themselves now as never at any other time; the sweet notes of friendly little chickadees: the varied colors and textures of tree-trunks and sumptuous richness of the evergreens, and the air that is like new life; all these rejoice the eye and the heart and quicken the sluggish pulse of the dweller in paved streets, and strength comes into his step and he remembers what his limbs were meant to do for him.

It grew steeper as we toiled upward, glowing with the hearty exercise. At times we caught glimpses, through the notch of the stream, of the hills we were leaving behind, all pale and dim. It was hard to keep to the trail, which we

lost occasionally, and here was good evidence that these winter solitudes were not often invaded, for it was marked only by a summer blaze, and this was often quite concealed by the depth of snow. The great spruces among which we plodded grew smaller and fewer by-and-by, firs taking their places; at length they disappeared entirely, and there were nothing but the smaller firs and some crooked, stunted birches.

There had been at one time, farther down, some question as to how far we were going, and the men had been told that we should go as high as to Lake Tear of the Clouds, the little pool which lies upon the ridge connecting Tahawus and Mount Skylight, at an altitude of 4,300 feet; as the highest source of the Opalescent it possesses the distinction of being the extreme head-water of the Hudson River. So far we had had merely the exertion of trudging up a long, rather steep hill, and there was no reason why we should not continue. Now through the slenderer trunks of the diminishing forest, we saw ahead a somewhat steeper slope, and near its crest the trees had a singular appearance—as we approached we saw a strange spectacle. The little firs stood close together, and upon all their stems the force of continued storms had so packed the driven snow that it was plastered upon them for their whole height. It was the ghost of a wood, clad in its winding sheet, or some weird hyperborean fairyland; we began to feel that we were reaching heights where the elements worked in ways we had not known.

We passed along, through small, ragged woods, the ground becoming more and more level, and just at noon came out upon the clear space of Lake Tear, fifteen hundred feet above Lake Colden. A little, lonely, wind-swept bog, surrounded by close ranks of sombre firs—not very interesting in appearance, and even had it been more so we should have bestowed upon it but scant attention. For there at last, in full view before us, towered the snow-cap of that mountain up whose long flanks we had labored since the morning. It was not far now to the limit of the trees; among those just about the bog were a few of medium height, but upon the slopes above they diminished rapidly in size, became whiter and whiter with their

burden of ice and snow, and then faded off into the smooth steep slant of unbroken white crowning all.

I heard a brief exclamation from Pinchot, indicating that in his opinion it would be no great task to go on to the end, to which I instantly assented. And it looked easy enough; there were no visible obstacles, no precipices or rough places of any kind: nothing but the same long upward incline. Surely we might as well climb on for another thousand feet, especially since it seemed so plain that upon that storm-beaten summit there could be little more than a thin layer of firmly-packed snow, giving good footing. There may have been a moment of reluctant, unexpressed acknowledgment of what was indicated by the swirling clouds of rime that enveloped and partly obscured the big peak and dimmed the sky, but that was all.

We crossed over to such lee as was afforded by the trees on the northern side of the meadow and set about making some tea. We were not any too successful, as dry wood was hard to find, and we had to be content with a wretched smudge eating its way down into what seemed to be a bottomless snow. Then the men failed to find water, so we melted snow—and at last produced a most vile mess, but which was hot and strong and therefore welcome. This and some partly-thawed doughnuts made our luncheon, and we were ready. I left my camera here, as it was rather heavy and would be cumbersome and almost entirely useless, but Pinchot carried his kodak.

We passed along to the eastward, over quite level ground for less than a quarter of a mile, and then turning sharp to the left began the ascent. The walking was bad, as the incline was quite steep and the snow very heavy, and the little fir trees grew so close together as greatly to impede our movements. For my part I rather welcomed the exertion this demanded, for I found that I had let my feet get cold while we were resting and I expected to warm them by action. At first we actually pushed our way through the branches, but as we climbed higher the trees stood farther apart. Queer little mis-shapen dwarfs, gnarled and perverted, struggling to maintain their kind in this forsaken place. Not only were they bent by their crushing burden of snow, but they were literally

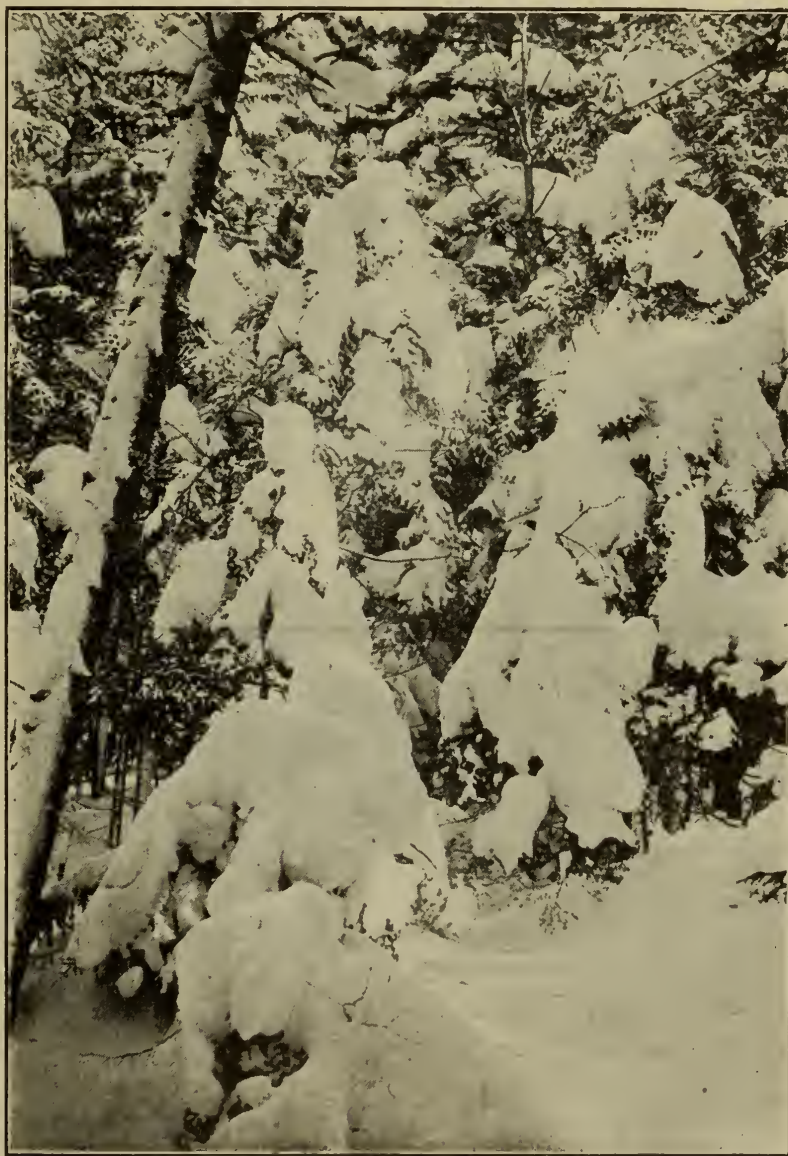
cased in ice even to every separate needle. How little they looked like trees; how like some strange frozen elves, hoary with immemorial antiquity, grimly warning the intruding stranger from the region meant for the abode of the Red Man's gods alone.

One of the men, who wore very long snow-shoes, somewhat of the pattern of the northwestern shoes meant for open country, and which must have been quite awkward for the place we were now in, here announced that the difficulty of their management and the painful condition of his feet necessitated his turning back; so we charged him to go down and do what he could to maintain the fire we had left smouldering below. We pushed on with the other guide and presently came to the end of the timber. Here we found a steep bank, rising above our heads and formed by the edge of the snow-cap reaching down over the matted tops of the dwarf spruce which fringes the timberline.

Over the bank came an icy blast that for a moment made me quail at the prospect it revealed of what lay above. I took my old "habitant" sash from about my waist and wound it around my head and the lower part of my face, for I knew that the single plush cap I wore would be utterly insufficient. Then with a series of wild plunges I scrambled up, the others having preceded me. I found that the snow above was a kind

of crust over the tops of the trees and was coated with shell-ice, just strong enough not to break under the spread of the snow-shoes and so slippery as to make control of them impossible. There was only one thing to do—fall down; and this I did and took off my snow-shoes. Pinchot had got ahead but came back to help me. The guide who was near, shouting to make himself heard in the awful wind, complained that he had a sort of numb feeling in his leg, and

when we told him to go back; he turned and disappeared in the direction whence we had come. Then I struggled on—it was only about a hundred yards or so, but I was thankful it was no more. The crust would bear me up for a few paces, and then give way and down I would sink to the waist in a tangled mass of thick-set branches. The wind caught the big snow-shoes and tugged at them with vindictive fury, and the thought of the predicament the loss of them would entail filled one with a kind of angry terror. When



"THE BEAUTY OF THE SNOW AND ITS MANY WONDERFUL FORMS."

we reached firm ground, we first sought safety for the snow-shoes and found the strong, crooked top of a fir tree peeping above the snow, to which we tied them securely.

The way now led straight up-hill and mighty unpleasant it looked—what we could see of it, that is, for the wind was no more to be faced than a battery of charging razors; and to stand upright in it was more than we cared to attempt.

The ridge up which we were crawling on all fours was in large part smooth ice, with only occasional patches of snow or little projecting tips of rock to afford hold for hands and knees. We worked our way slowly and painfully, gaining one of them after another, and when the more furious gusts of the ever opposing wind would descend upon us like malignant fiends, we lay prone at full length and buried our faces in our folded arms, that we might breathe; and hoped not to be dislodged from that precarious holding, for close upon our right hand the mountain fell steeply away to what seemed to be a precipice, and between us and that dreadful brink was no obstacle to a descent into the abyss. The cold was such as I had not ever imagined, and I have seen something of cold weather both in Quebec and on the Minnesota prairies; it cut

sisted against my fear and dislike I cannot say, for the question was decided for me by two things: one, the discovery that my feet, if not actually frozen, were at least frostbitten; and the other that I simply could no longer stand the cold, which was benumbing my whole body, and so I had to give it up.

We were about two hundred feet below the summit, I think. As Pinchot wanted to go on, I went down alone to where we had left the snowshoes. Here was a kind of notch in the side of the mountain, at the other end of which was a hollow under a ledge of rock, partly sheltered from the wind, where I found some soft snow, in which I tramped a hole and proceeded by stamping my feet to restore circulation in them. It took some time and became extremely painful, but it was a most fortunate thing for me that it succeeded. I could



"THE TUMBLING MASS OF MT. MCINTYRE."

and choked and hurt with maddening cruelty. All view of the world below us was cut off by the dense curtain of drift, and all that we could see was the treacherous slope to which we clung, vanishing dizzily down into a gray-white nothingness.

How much further I might have per-

see Pinchot, still creeping upward with many pauses, until finally he disappeared over a shoulder at the top. He seemed to be gone a long time. I knew him to be an experienced mountaineer and not likely to get into a scrape, but it was a very considerable relief to my anxiety when I saw him again and he began the

descent; and I gave him as warm a welcome as the frigid surroundings permitted when he came within speaking distance. He had been to the signal-pole marking the summit and had brought

into laughter—truly we presented a peculiar appearance, though we had not noticed it before. Icicles hung even upon our eyelashes, and Pinchot's beard was coated so solidly with ice that he



"I CARRIED NOTHING BUT MY CAMERA STRAPPED TO MY BACK."

back with him a fragment of the wood, and he had even taken a photograph of it. On the topmost rock of Tahawus he had felt the unbroken weight of the merciless gale, and everything from New Hampshire to North Carolina was beneath him. But of it all he saw nothing, for the panorama, however splendid, was hidden by the stinging drift.

He, too, was nipped, and it says something for the cold that his ears were frozen through a thick sealskin cap, pulled well over them. I rubbed them for him, and when he in turn had stamped and swung himself into comparative warmth again, we made our homeward start. Again we broke and crashed into the tree-tops, but we went faster now, for when we found ice we slid, and cared not how we landed—anything to get out of the devilish wind. When we did, and stood in the deep snow among the poor frozen trees, it felt like the warm breath of spring. Then we looked at each other, and burst

looked like nothing I can think of, unless, perhaps, a walrus.

We got back to Lake Tear at half-past two, having been about two hours engaged upon the climb. The rest of our downward journey was devoid of incident; the guides went on ahead, and although we stopped frequently upon the way down-hill to take pictures, we arrived at Lake Colden before dark. One of the guides—he of the snowshoes—was badly frozen, and was lame from it until the following autumn. My feet gave me some little trouble for about a month after, but not serious, thanks to my timely stamping. When we came out again into civilization and found a world of snowbound trains and bursted waterpipes, we made the interesting discovery that we had selected as a suitable and convenient moment to go to the top of the State of New York, 5,344 feet above the sea-level, the beginning of the blizzard of February, 1899.

SALMON TROUTS AND CHARRS.

THEIR RANGE AND LURES.

By Wm. C. Harris.

ALTHOUGH dominated by the love of his favorite pastime and enthusiastic in its indulgence, the angler, if well poised, is not content with a series of delightful outings, but desires a knowledge of the habits of the quarry he seeks, the range of its habitat, the number of its variant forms, and the characteristic qualities that differentiate them. In his search for this knowledge he will enter a broad but useful field of investigation.

There are thirty-one species of salmon trouts and charrs native to American waters, and three forms that have been introduced from Europe. Of these thirty-four varieties, fifteen (including two of foreign origin) are salmon trouts, and nineteen (including the European saibling) are charrs. I will as briefly as possible give the classification, habitat, and the characteristic traits of both the salmon trouts and charrs. But with this host of variant forms before him, the angler will naturally ask in the first place :

"How can we tell which is a salmon trout and which a charr among this confusing multitude of forms of our favorite fish?"

This difficulty is easily solved. Put your finger in the mouth of your capture, and if you find the vomer, a bone situated on the front part of the roof of the mouth, flat, with teeth on its body, and behind these an irregular single or double series of teeth, you hold in your hand a salmon trout. If you find the vomer much depressed, convex, and shaped like a boat, with teeth on the head of the bone and none on its shaft, you have a charr under inspection.

The most numerous in species and classification is the "cutthroat," variously and locally known as the "black spotted trout," "Rocky Mountain trout," or "sa-pen-que," or "good fish." Its scientific name is *Salmo clarkii*, and its range of habitat is in all the clear streams from Kamschatka and Alaska, south to northern California.

This fish is at once recognized by the crimson slash on its lower jaw, its low dorsal fin, slightly forked tail fin, short

head, deep-red lower fins, and the profuse black spots of varying sizes on its back and fleshy part of its tail. The dorsals and tail-fin are covered with small spots, with a few on the head, but the belly is seldom spotted. The sea-run specimens are uniformly silvery, and the males have a lateral band and patches of light red.

In addition to this typical species, there are ten other variant forms. They are :

"The Columbia River trout"—*Salmo clarkii clarkii*—which is found in all the coastwise streams from Puget Sound to Humboldt County, Cal. It has the red slash or cutthroat mark on its lower jaw, very distinct, and is profusely spotted.

"The Yellowstone trout"—*Salmo clarkii lewisi*—is very generally distributed west of the Rocky Mountains and along the route of the Union Pacific Railway. It differs very slightly in form and coloration from the so-called "Columbia river trout," and like it has the crimson throat slash very prominent. I am personally familiar with the angling qualities of this cutthroat, having spent many months on its waters of habitat, particularly those of the Yellowstone river and the affluents of the Upper Missouri. I found it in the comparatively shallow waters of the Gallatin, Madison, and Jefferson rivers to be more game than in the Yellowstone, and those of the Gallatin were somewhat similar in their habits to our Eastern brook trout (*fontinalis*), in that they sought the shallows and shelter of the little bays and the shelving sides of rocks from which they darted fiercely at the lure of feathers.

The fish in the affluents of the Missouri did not average over a pound, but those of the Yellowstone were as heavy as seven pounds. All took the standard trout flies used on Eastern waters, and the angling tourist to the far West needs only to stock his fly-book as he would do when fishing for trout in the brooks or rivers of the Atlantic slope. I caught no trout in any of the waters named that were without the "crimson slash,"

which, by the by, is somewhat of a misnomer, for the slash is horizontal in direction and not crosswise.

The cutthroat trout is not so game when hooked, as the Eastern brook trout (*fontinalis*), nor is it so delicate in flavor, but its size, abundance, and picturesqueness of its habitat will, when generally known, make a trip to the Yellowstone and the headwaters of the Missouri River a part of the angling life of all "well-rounded" trout fishermen. One striking feature of the cutthroat is the wide difference in form and color, varying with its habitat. By this I do not refer to the transient coloration which obtains in the Eastern trout and other species arising from the changing physical condition of the stream inhabited by them, but the fixed variations in color and markings of this species in different waters often one hundred miles apart.

To illustrate: The trout of the Yellowstone is not only a broader, stouter fish than those of the Gallatin and Elk Creek (near Heron, Mont.), but has a deep, golden tone diffused over its sides, tinting the white of the belly with a tinge of yellow. This coloration does not exist to the same extent in the fishes from the Gallatin or Elk waters. In fact, the Gallatin fish has but little of the golden tinge, a brown back and silvery sides being its special adornments. I found the Elk Creek fish invariably with regular parr markings almost identical with those of the young salmon and with a strikingly brilliant metallic sheen of silver spreading over its sides and belly.

Salmo clarkii gibbsii does not appear to have a popular or local name. It has no red below the lower jaw like that on the species named above, and is at best only a provisional classification. It is found in the streams of Idaho and Washington.

"Lake Tahoe trout," "Truckee trout," "Silver trout," are the popular names for *Salmo clarkii henshawii*, a salmon trout of distinct character, found in Lake Tahoe, Cal., and in other lakes and in many of the streams on the eastern slope of the Sierra Nevada. Its average weight is about six pounds, but occasionally one up to twenty-five and thirty pounds is taken. This fish is common in the San Francisco markets, and is much esteemed as a quarry by the

anglers of California. They are caught either by still fishing or trolling; when following the first-named method a depth of forty to fifty feet of water is found, and live minnows are used as bait. A correspondent of *The American Angler* describes the handline trolling tackle as being "a spoon with an immense reflector, cone-shaped, with two wings and a lot of shark hooks below it." Certainly a death-dealing device, and aptly deserves the title of "barbarous Tahoe rig," which has been applied to it.

This trout may be distinguished by its long and comparatively slender and acute head, the muzzle being somewhat pointed, but bluntish at the tip; the dorsal fin is small, and the caudal short and rather sharply forked. Its uniform green coloration above the median line, varies in tone when the fish is taken from other waters than Tahoe lake; the sides are silvery, with a strong shade of coppery red along the lateral line, and, as a rule, it is profusely black spotted on the body, belly, head, and sometimes on the snout.

The "trout of Eutah lake" is classed as *Salmo clarkii virginalis*, and in the lake named reaches the size of eight to twelve pounds. It is one of the prized edible fishes of that section. The usual black spots characterizing the cutthroat trouts, are in this species rather small but profuse, except in the alkaline waters of Eutah lake where the fish is very pale in color and the black spots infrequent.

"The Rio Grande trout," *Salmo clarkii spilurus*, is one of the esteemed angling fishes of the West. It reaches a length of thirty inches and like all its congeners rises freely to an artificial fly. It is profusely black-spotted, the spots being larger on the posterior parts of the fish, with very few on the head, and most numerous on the fatty dorsal and tail fins. It is found on the upper Rio Grande river and is, in specific characters, apparently identical with the fish next named. A correspondent writes me:

"I believe I have tried about everything in the way of artificial flies for the Rio Grande trout and have found that for steady use during the months of August and September, the red-bodied gray hackle is the most successful of them all. As a rule I have a little of everything in my fly-books, but always

take a big bunch of gray hackles. When and where to catch them may be answered by stating that August, September, and October yield good scores, but August is the most fruitful month and the most pleasant one, as in September the nights get pretty cold. The Rio Grande trout take freely flies tied on hooks from No. 4 to No. 8 in size, and there are a good many fine fish yet to be had in all our mountain streams."

"The Colorado River trout"—*Salmo clarkii pleuriticus*—is one of the most prized of angling fishes by the Waltonians of Colorado and adjacent sections. It is a large, handsome trout and its anatomical features are almost identical with those of the typical cutthroat, *Salmo clarkii*, before described. It is very variable in coloration, "sometimes profusely spotted, sometimes with large spots and occasionally with strong golden sides." Its sub-specific name, *pleuriticus*, signifies "a red-lateral band," which is usually present on these fish, and leads somewhat to confusion, as the rainbow trout by many fishermen is identified by the crimson band on its side. In the case of the Colorado trout, however, the band is more of a golden shade, and faintly shown in comparison with the strong crimson one on the side of the rainbow. It is said to be on record that a Colorado trout weighing over twenty-six pounds was caught in the Rio Grande River, but the average is probably below three pounds, and the size varies with the size of the streams in which they are caught.

There is a singularly-colored trout found in Waha Lake, Washington, a mountain lake without outlet. It is of small size and anteriorly is of dusky-bluish color, with no silvery tints and with dark spots only on the first dorsal, caudal, and fat dorsal fins. It rises well to the fly.

The remaining two species of salmon trouts known by their specific name of *clarkii*, or "cutthroat trout," are the Arkansas River or "green-back" trout—*Salmo clarkii stomias*—and yellow-fin trout, *Salmo clarkii macdonaldi*.

The "greenback" is a small black-spotted trout, rarely reaching a pound in weight. It is very common in all the tributaries of the Arkansas River and in the Twin Lakes. It spawns in the spring, in snow water if possible, and it will leave spring water to find

snow water. In winter, however, it seeks for warmer waters. It is said that when the winter breaks up the trout are too blind to see bait. In color it is green or almost black on the back. The lower fins and the throat are bright red, but there is not much trace of a lateral band, and the black spots are large and mostly confined to the posterior part of the body. It rises very freely to the fly.

The yellow-fin trout (*macdonaldi*) is only found in Twin Lakes, Colorado, and can be easily identified by the bright yellow on its lower fins and a broad shade of lemon-yellow along its sides. It is a light olive above the lateral line, with the characteristic crimson slash under or along the lower jaw. It takes the fly readily, and it is frequently found on the shallow gravelly beds of Twin Lakes.

We now reach the steel-head or hard-head trout, or salmon trout (*Salmo gairdneri*) of the Pacific slope; those that do not go to sea in the more southern waters seem to be anatomically allied to the rainbow; those of the far North apparently blend with another species of the steel-head species, while those of intermediate waters approach very closely in form and markings to the cutthroat trout.

Be all this as it may, the angler finds in the steelhead one of the grandest fighters on the rod to be met with in the world's waters. It is a fly-taker or natural bait devourer; on seizing the first-named lure, he is an acrobat, leaping repeatedly from the water. When he has swallowed the natural bait, he surges deep and strong. His leaping trait naturally leads the angler to believe that he is closely allied to the rainbow, the only trout on the Pacific slope that rose to the writer's fly, and leaped frantically into the air. This fish is particularly abundant in the Columbia and Frazer Rivers, and is occasionally taken in the upper Sacramento River of California. Like most of the salmonoids of the Pacific Coast, this fish revels in local nomenclature. The Russians call it "scomba;" the Kamchatkans, "my kiss;" the Indians, "humaana," to which we have added steel-head, hard-head, and salmon trout. It is a large trout, sometimes exceeding twenty pounds in weight, and is migratory in its habits. I have taken several three-

pounders with the fly in the upper waters of the Salmon River at least fifteen hundred miles, as the river ranges, from the ocean, and our artist painted one from many specimens taken from the traps of the market salmon fishermen of upper Puget Sound, when the fish were on their way to their spawning grounds, in company with three or more species of Pacific salmon. The most striking physical markings of the steelhead is the wide, square tail in the adult fish, and the broad, crimson lateral band in the breeding season, which coloration, in the California fish particularly, justifies to some extent its claim of kindred to the rainbow.

There are but two specific or variant forms of the steelhead. One, which is found solely north of California, in the interior lakes, and in the Columbia and Frazer Rivers, is classified as *Salmo gairdneri kamloops*, but is generally known as the "kamloops" trout, or "stittse."

Of the salmon trouts only the rainbow (*Salmo irideus shasta*) and the German or brown trout (*Salmo fario*) are found in waters east of the Rocky Mountains. The former have been transplanted from the McCloud River of California, and this form of the rainbow is the only one cultivated by Eastern fish-culturists. It may be known on sight by the characteristic red or crimson band which is always found in the male fish, and extends along the lateral line. In the female this band is sometimes faint, and occasionally absent when the fish is in its native waters; of the many thousands of rainbows that we have seen in preserved waters this lateral band of red was always present, and on no other species of salmon trout have we observed this characteristic mark, although the cutthroat trout (*Salmo clarkii pleuriticus*) of the Colorado River is described by Jordan and Evermann as having "usually a red lateral band;" the sub-specific name *pleuriticus*, from two Greek words signifying "from" and "side," having been given this species in allusion to the red lateral band.

The charm of the rainbow to the angler lies in its great game qualities, and, strange to note, these are displayed more strongly in the transplanted fish than when it is captured in its native western waters. In the two streams where we have caught them, the Au Sable

of Michigan and the Au Sable of Essex County, N. Y., they far exceeded in gameness the brook trout (*fontinalis*), and the most distinguished and pleasurable feature consisted in their jumping when hooked on a slack line, a quality not possessed by our Eastern trout (*fontinalis*), or any other species of trout, either in the eastern or western waters. The black bass (small-mouthed), the rainbow, and the grayling, are the only fresh-water fish known to us that come out of the water, hooked, of their own sweet will. The Eastern trout, and possibly a few other stream fish, will sometimes lunge out when held tightly on the rod, but the acrobatic feat of leaping free from the water as a means of escaping capture is a quality possessed by few fishes sought for by the angler. Of course I except the salmon (*salar*) with his lesser brother in weight but not in agility, the ouananiche.

The rainbow trout has a very wide range of habitat in all the mountain streams of California and adjacent States from the Klamath River to San Luis Rey, probably entering the sea and growing larger there. They have been subdivided into six species, the most interesting of which are the Kern River trout and the golden trout *Salmo irideus aquabonita*. The sub-specific title, "beautiful water," is derived from the name of a cascade on Volcano Creek, Cal., where this fish abounds.

The Kern River trout (*Salmo irideus gilberti*) is abundant in the Kern River, Cal., and it is merely a matter of "put in and pull out" to fill the creel. They are sturdy fighters under water, but at no time during our stay of a week in this section did we observe "the leap," which we closely watched for and hoped would occur. This fish is not likely to become a favorite with the angler, as he is only found in the upper ranges of the Sierras of California, which are two days' journey on mule or horseback from a railroad station. It may be distinguished from its brethren of the rainbow genus by its small scales, profusely spotted back and sides, and spots on the upper part of the pectoral fin. It reaches the weight of eight pounds, and rises freely to the artificial fly, but has no special excellence as a table fish.

The golden trout (*Salmo irideus aquabonita*) has probably elicited more interest from the angling fraternity, as it

certainly has from the ichthyologists, than any other fish of American waters. It is one of our "poetic fishes," as the grayling has been from the time of the Druids. It lives in almost inaccessible waters that on their lower stretch leap down a steep and rocky gorge, with small pocket holes here and there, that contain but little water but many golden trout. We journeyed by pack train three days to reach their home in the Mt. Whitney region. Then we passed about six hours on Aqua-bonita brook, and caught several dozen of these golden beauties.

We found these fish to rise freely to our flies, and, as a table fish, they surpass in flavor all the salmon trouts of the western coast. The beauty of their coloration surpasses description. Above the lateral line olive prevails; the sides and belly are of a light golden, and the dark cross shades (parr markings) of the immature trout are always present. Along the middle of the sides there is a deep scarlet lateral stripe, and on the middle line of the belly another broad scarlet band extending from chin to anal fin, and still another fainter shade of golden crimson coursed from anal fin to tip of caudal. The entire region of the head was uniformly a bright orange, and dark spots, large and well marked on the fleshy part of the tail, appear on the dorsal fin, which, like the other fins, were deeply tinted in orange, with a faint black tip on the ventral fins; yellowish-white on the dorsal, and the caudal olive, tinged with orange on its lower edge, and profusely black spotted. The pinkish color inside of the mouth and light orange of the gill cavity added a new charm to the transcendent coloration of this aptly named golden trout. This fish is not only an exceptional table fish, but next to the rainbow, is the most game, when hooked, of all the small salmon trouts of the western waters.

The intermediate rainbows not described are two in number—the common brook trout of western Oregon—*Salmo irideus masoni*—and the nissuee, or no-shee trout of the upper Sacramento River. The first-named seldom weighs a pound, but the latter reaches twelve pounds. Both fish rise freely to the artificial fly.

The introduced salmon trouts are the German or brown trout (*Salmo fario*),

called von Behr trout by the United States Fish Commission, and the Loch Leven trout, the first-named being brought from Germany and the second from Scotland. Many authorities question the differentiation between these two species, although the presence of red spots on the brown trout and the absence of them on the Loch Leven fish is a strongly marked characteristic.

The brown trout, owing to its great growth and consequent ability and practice of eating our smaller native brook trout (*fontinalis*), has lost popularity among those who seek for desirable fish to plant. When introduced, they should be in waters where our native trout do not live. They, as well as the rainbow, are adapted to waters of a higher temperature than our brook trout, and although the brown trout possesses no game qualities equal to those of *fontinalis* or the rainbow, it may be planted in private waters where the species may live supreme, thus giving a variety to the fishing.

The Loch Leven trout (*Salmo levenensis*) was brought from Scotland about fifteen years ago, and has been planted with moderate success in some of the waters of the Eastern and Western States. It takes its name from the old lake adjoining the dismantled castle within which Mary Stuart was imprisoned by Queen Elizabeth. It is very closely allied to the brown trout and is a beautiful and gracefully formed fish, and may be distinguished from its congeners by the absence of red spots on the body, which, however, faintly appear on specimens more than four years old, but so dimly as scarcely to be seen. This peculiarity of coloration is disputed, and it may be another illustration of the effect of food and environment on the coloration of fish, or it might be an error in labeling the tanks at the shipping end, thus "mixing the babies up." The absence of red spots on this trout, when less than four years old, is a matter of fact with Scotch anglers, and as the Loch Leven trout seldom grows beyond three pounds and consumes four years in getting to be about two pounds in weight, but little confusion will occur over this red spot theory.

Monographs of the charrs (*salvelini*) will appear in a subsequent issue of OUTING.

THE PROMISE OF THE AUTOMOBILE IN RECREATIVE LIFE.

By Robert Bruce.

THE extension of the domain, and the multiplication of the means of pleasure-life, which so markedly characterizes the present age, is due, perhaps, not more to an unexampled awakening of the recreative instinct than to the increased opportunities afforded for wider personal participation in the many forms of accepted sport. A broad-gauged, far-reaching change is in process. The old idea of physical exercise merely for its own sake has long been losing its hold. Here, as elsewhere in contemporaneous living, consciousness of some underlying, actuating incentive, and the realization of pleasant and profitable auxiliary results, has been needed to lead the way to healthful, cheerful and invigorating performance of well-sustained interest, and to endow with vitality that which the conditions of the times might otherwise narrow to feeble insignificance.

Incentive finds more or less expression in all recreations worthy of encouragement and support. To some there has been lent the enthusiasm and interest of friendly rivalries conducted in true and dignified spirit; while others are linked with the progress of some modern invention. The latter have already afforded the devotees of outdoor life some efficient means of pleasure travel, by the use of which the radius of individual movement has been sensibly lengthened, and freedom, ease and comfort in so doing, favorably redefined.

Two types, both exclusively modern—the bicycle and the automobile—stand at the head of the list of mechanical accessories to sport and recreation; the first-named credited the most in achieved results; the second—the special contemplation of the present paper—showing from this view point the brightest promise for the future.

Those who best know the motor carriages of to-day—more especially clear-sighted and hard-headed inventors and manufacturers—are, as a rule, the most conservative of their proven capabilities and the least ungenerous to their

remaining faults. The professional boomer, in whatever form appearing, is the worst possible enemy to a movement the success of which must ultimately be measured by ability to satisfactorily meet a number of severe mechanical requirements. Already some of those responsible for wide-of-the-mark utterances are formulating humble apologies to the public whose interests they have been pretending to serve, and whose confidence they have rightfully forfeited. The publicity radiating from this industry is either well-founded or withering; that of *OUTING's* publishing may be depended upon as solely of the safer type.

One refreshing fact confronts the friend of automobile development in whatever way his observation may be turned—the serious thought of designers and makers finds utterance in the construction of models first for pleasure and afterwards for commercial uses. That this has not been the result—as some profess to believe—of a desire to solve the easier problem first will be apparent when it is understood that the most bothersome of all structural requirements are those called for by carriages adaptable to such highways, loads, powers and speeds as are contemplated for private ownership.

Neither the ponderous omnibus nor the lumbering autotruck call for equal nicety in unity and detail of outworking as compared with the self-moving surrey,





or phaeton, or even the roundabout. To combine strength and durability with reasonable lightness and speed, high efficiency and endurance of propelling forces, with symmetry of outline and ease of management, grade ascending power, with ample carrying capacity, and so following—these are but a few of the special difficulties to be overcome in the construction of pleasure types of automobiles. No more arbitrary array of fixed requirements could easily be formulated to vex designers and builders.

And, yet in at least one important respect the motor vehicle industry is greatly favored over all other of the developments of modern mechanics. The purchasers of its earliest products are almost without exception men and women of means, of patience and personal enthusiasm for an ultimate, rather than immediate, satisfactory outcome of their investments and efforts. Many are themselves, indeed, amateur designers and constructors of no mean order. Not a few have suggested, and in extremity demonstrated, various devices and improvements already indispensable to the operation and control of accepted models.

Whatever may result from the combination of explosive gas and compressed air as a propelling resource for automobiles—and the possibilities of success in this direction grow with the progress of daily experiment—will ever stand credited, first of all, to the courage and perseverance of an American, who has for years backed his belief in the worth of this system with his time, labor and fortune, and is now equipping a factory for the manufacture, on an extended scale, of vehicles brought to promising efficiency in his private service. Whether

or not these models secure that share of public favor expected for them, it is admitted that their possibilities are being searched to the uttermost. This instance, although the most notable of all, is but one among the many known to the current records of the trade.

There are perhaps two scores of improvised laboratories in the United States to-day designed solely for automobile experiment, and doubtless one-half that number of completed vehicles assembled on individual lines from working parts made to special single order. The sum-total of value of such outside coöperation is beyond easy calculation at this particular stage of the movement.

Were it possible to select a goodly number of the best models of each of the three practicable types of carriages, namely, those propelled by (1) electricity, (2) the hydrocarbons, and (3) steam, place them in the hands of persons of active and varied pleasure-searching inclinations, and afford them full and free opportunity for the all-round use of these machines, a comprehensive summary of their experiences would form a fair reflection of what we may confidently expect in due time from the addition of the automobile to the means of recreation. New possibilities in track and road racing, in general pleasure riding and touring would be demonstrated before our eyes. We would be fully justified in availing ourselves of this improvised index to future probabilities, for the reason that the certainty of far-reaching improvements in contemporaneous types would lend extreme conservatism to any calculation of such matter.

Another margin of safety would be afforded in the likelihood that selling prices will in some degree decline with the multiplication and further perfection of the facilities of production, thus materially increasing the number of machines, which coming years will place in commission. Whatever has already, through vexatious trials, been accomplished, even one by one, will be but primary practice for multitudes under conditions which will be brought about so swiftly as to become commonplace with us, before the end of the decade upon which we are soon to enter. We are therefore privileged to foreshadow the future position of the automobile in sport and pastime

by means of the account it has already rendered of itself.

Competition on the road and track alike divides itself into two broad classes: contests between (1) motor cycles and tricycles (both commonly known as "motocycles,"), and those between (2) motor vehicles as such. The lines separating these classes are drawn much more distinctly in Europe, and especially in France, than in the United States, owing largely to the more advanced state of both industry and sport in that country. Motocycles are of many types, constructed after the manner of heavier bicycles and tricycles, and ingeniously fitted with various motive powers. Racing with these machines has come to be very popular on the Continent, and more so in Great Britain than with us. At a tournament held at the Crystal Palace, London, on July 1st, 1899, five events were run, and each one was well contested, notwithstanding that Mr. S. F. Edge, formerly a champion middle-distance cyclist, swept every event on the programme. He won the mile handicap in 1:50, the two miles handicap in 3:38, and the five miles scratch in 8:55 2-5, while in the hour race he covered 34 miles 540 yards, and finally, with Jarrott for partner, beat Stocks and Ridgeway in the mile tandem in 1:43 4-5. There were six starters in the mile, six in the two miles, seven in the five miles, and five in the hour competition.

The road record between London and Edinburgh has always been much sought after by British long-distance men, with the result that the figures have been gradually reduced for the bicycle to 25 hours, 20 minutes. Recently Mr. J. W. Stocks, on a motorcycle, undertook to eclipse the cycle record, which he did very effectually. Leaving the Scottish end at 6 A. M., he reached London at 2:35 the next morning, covering the route in 20 hours, 35 minutes, and averaging, including all stops, nearly 20 miles per hour for the entire journey. The superiority of the latter performance more clearly appears when it is remembered that the cycle record was, like the automobile record, practically a single dash from start to finish, which a trained cyclist is able to sustain for that number of miles like an animated machine. And yet the time of the motorcycle, notwithstanding all the perils and

drawbacks of management at high speed by night, was 4 hours, 45 minutes less than the cycle time.

In the last annual race over the Paris-Bordeaux course, Bardin's average time for the 565 kilometers was $42\frac{1}{4}$ kilometers per hour. In the "Tour de France" (motorcycle division) Teste sustained a uniform speed of $41\frac{1}{2}$ kilometers per hour over a distance of 2,291 kilometers. Paris-St. Malo was won by Renaux on the motor bearing his name, his time for the 372 kilometers giving the high average of 52 kilometers per hour. The winner of the Paris-Dieppe race averaged 42 kilometers per hour, and Teste was victorious in the shorter Paris-Trouville course of 175 kilometers, making 57 kilometers per hour. Baras scored three brilliant victories in the Paris-Lille (258 k.), Paris-Ostend (323 k.), and Paris-Boulogne (330 k.) races, his respective average times per hour being $48\frac{1}{2}$, $52\frac{1}{2}$ and $45\frac{3}{4}$ kilometers.

The last-named figure is perhaps the most meritorious of them all, inasmuch as it was made on a quadracycle, carrying a passenger instead of the usual stripped tricycle. The last of the big races for 1899, Bordeaux-Biarritz, was productive of high averages, and Bertin's time for the 281 kilometers reached the record mark of 60 kilometers per hour. Mention must also be made of the shorter distance performances of Beconnais, at Acheres, in September. On the famous "route du Parc d'Agricole," this motocyclist covered two kilometers in 1 minute 50 3-5 seconds, and made the kilometer with flying start in 48 seconds, equaling a speed of 75 kilometers (about 47 miles) per hour. This



feat, coupled with his hour record of 42 miles 337 yards, on the track, go far to compensate Beconnais for his comparative lack of success in the longer road races.

Motor vehicle speeds average somewhat less than the speeds of motorcycles, owing principally to the heavier weights necessary to be carried and the difficulty of handling a large machine with the same ease and quickness of controlling movement as a small one. Notwithstanding these facts, however, the average of the winner of the Paris-Ostend race (Levegh-Girardot) was 52 kilometers per hour, and in the Paris-Boulogne, 54. Tourist vehicles have averaged 24 or 25 miles per hour for upwards of 200 miles, carrying three or four passengers in a heavy touring body.



The personal mount of the Hon. John Scott Montagu, M. P., has per a recent communication to the *Motor-Car World* (England), as a matter of record averaged $29\frac{1}{2}$ miles per hour between Paris and Amiens, a distance of about eighty miles of rather hilly country, and 30.3 miles on the comparatively level highway in Belgium between Dunkerque and Ostend. These are averages from end to end of distances named, and, of course, on the favorable level or slightly down-hill portions of a speeding effort, forty and fifty miles per hour are sometimes maintained for miles at a time.

In the "Tour de France," briefly noted in the automobile records department of the *Outing* for January, 1900, René de Knyff, on a 16 horse-power

Panhard-Lavassor, averaged 51 kilometers per hour over a route 2,291 kilometers long. The Paris-St. Malo was won by Anthony, with a 16 horse-power Mors vehicle, at an average speed of 50 kilometers per hour for the course of 372 kilometers. The same equipment gained the Paris-Trouville race, making an average of 58 kilometers per hour for 175 kilometers. Levegh, on a Mors, and Girardot, on a Panhard-Lavassor, who finished the Paris-Ostend race in a dead heat, averaged 52 kilometers to the hour for 322 kilometers. The 330 kilometers between Paris and Boulogne have been covered by Girardot at an average speed of nearly 54 kilometers per hour.

An interesting comparison of moto cycles and motor vehicles, in the matter of recorded speeds over identical courses, may be made by placing certain items in this and the preceding paragraph against each other. Omitting those where the comparison would be from any cause incomplete, we have the following:

	<i>Motor- cycle average.</i>	<i>Motor- vehicle average.</i>
Tour de France, 2,291 kilometers.....	$41\frac{1}{2}$	51
Paris-St. Malo, 372 kilometers.....	52	50
Paris-Trouville, 175 kilometers.....	57	58
Paris-Ostend, 322 kilometers.....	$52\frac{1}{2}$	52*
Paris-Boulogne, 330 kilometers.....	$45\frac{3}{4}^\dagger$	54‡

* Levegh-Girardot competition.

† Quadracycle machine with passenger.

‡ Girardot's record time.

It will be noticed that in three instances here noted the motor-vehicle speed exceeded that of the motorcycle, and of these, one event was the longest of all, and the lower average of another is accounted for by the footnote marked with the dagger. The short distance records are uniformly to the credit of the lighter types of machines.

In the summaries of both motorcycle and motor-vehicle performances here briefly given, the promise of future competition plainly appears. A two-wheeled, three-wheeled or four-wheeled power-driven machine, capable of negotiating various distances at upwards of forty miles per hour to-day, carrying weights ranging from 100 to 1,000 pounds, possesses possibilities which the untamed inclinations of sport-loving people in the United States will hardly overlook beyond the time required by manufacturers to produce the machines. Road courses suitable for these contests will become many, and the use thus made of them ought to be surprisingly great and

widespread. Tournaments and track competitions will come, and grow into deserved popularity. And it may here properly be said that the personnel of contestants in automobile events must form a pleasing contrast to any oft-met type of cycle racing enthusiasts.

The supreme test in speeding consists in the management of the machine. The success of the operator depends upon his getting the utmost power and swiftness out of his motor; in knowing how to best supply it with fuel, and in the thousand-and-one precautions against being taken unawares or caught by accident. He must be perfectly cool at all times, have plenty of nerve force, and be an utter stranger to fear. When one has no misgivings either about himself or the mechanism under his hand, he is less likely than otherwise to meet with misfortune.

Many of the famous French motocyclists have been brought up in the workshops, and have therefore a thorough acquaintance with the practical side of their machines; but the best amateur management does not materially suffer from point-and-point comparison therewith. The latter displays infinitely more tact and resource; the former more mechanical dexterity. Since the skill of the operator counts for so much, and the liability to accident must always be taken into account, there is considerable glorious uncertainty about racing with automobiles; and, in fact, it is extremely rare to find the same person winning in consecutive events. All this tends to lend especial interest to the sport, and is helping to create a popularity for it.

Touring by motor vehicle, the social interest in general and the motor club interest in particular, already centering about this new form of transportation, are developments of the greater movement intimately related to the topics constituting the present paper, but impossible to comprehensively treat in the same connection. They will be subsequently discussed in *OUTING*.

The spirit in which the automobile has been seized upon by those to whom we must chiefly look for support of its further development, is the best possible, as well as the nearest available index to its likely position in the recreative life of the approaching century. That spirit can at this moment be credited

with having accepted and improved to the utmost every advantage vouchsafed it by the industry, and with a surplus of wholly rational energy and enthusiasm for the opportunities denied to-day but promised to-morrow.

These things are very largely in the hands of those who have brought real strength to the sport of to-day. The older need not necessarily suffer by the addition to the list of a newer one of only far-distant kin; for, vital and vigorous in growth as it promises to be, it is in conflict with none other that can be named. It may, indeed, serve the ultimate best interests of those who innocently fear its power and tendency to somewhat eclipse their favorite recreations. The self-propelling carriage will take one not to the depths of the forests but to the suburban traps and ranges; it



will find the river road, seldom the river; it will carry home only what the automobilist-angler succeeds in catching; the leg-weary cannot pursue fugitive golf balls mounted upon it, but it will find the way home before the enthusiasm and hilarity of the game has suffered sensible decline.

Observe with what refinement of conscience this new form of transportation stops short of interfering with anything in the recreative world that flourished before its day, and how modestly content it is to contribute to the means and resources of the practice and enjoyment of many of them! This is the last as well as the very first of the premises of this paper. By thus furthering the purposes of rational pleasure-seeking, the automobile must likewise confer upon life a long line of especial benefits and blessings.

FORM IN GOLF.

By Harry Vardon.

I HAVE never before written, or had published, any matter regarding my ideas of playing golf; and

I will commence by contradicting the statement so universally made by people when speaking or writing about me, that I "infringe every known rule laid down in the books and play a game which is peculiar to myself." The only peculiarity about the way I play is in the manner in which I hold my clubs, and this I will endeavor to explain, with the aid of the accompanying illustrations from life.

I grasp the club about two inches from the top, and I always play with very short clubs, my driver being only forty inches long, measured from the top of the shaft to the heel of the head; my brassey is the same length, my idea being that I have better control over a short club than over a longer one.

I place my left thumb along the center of the shaft and completely cover it with the palm of the right hand, the little finger of my right hand overlapping the knuckle of the first finger of my left hand, the end of the little finger being half way between the knuckle and the second joint of the first finger of the left hand.

I neither hold my club in the palms of my hands nor in the fingers; the shaft lies across my right hand and rests between the palm and the fingers of the left hand, and I grasp the club equally tightly with both hands. I use the word tightly because I mean tight, and do not mean to convey the idea that I merely hold the club firmly.

My idea in holding the club as I do, is that I, to all intents and purposes, make the two hands into one and consequently only have to consider the swing of one arm instead of two.

I adopted this grip after trying all kinds of methods of holding clubs, some seven years ago; and not until then did I feel the perfect confidence in myself which is absolutely indispensable to a proper control over the ball and the consequent control over direction.

I ought to add that I put my right thumb on the left-hand side of the centre of the shaft when driving, and straight down the centre of the shaft for all kinds

of iron shots. I never allow my club to move in my hand after addressing the ball until I have completed my stroke.

I carry the club for a full swing back behind my shoulders, almost parallel with the ground, my two hands a little above the top of the shoulder, about on a level with my jaw, and the point of the elbow almost squared a very little above the level of my hands, probably an inch, or possibly two.

I come down much straighter than men who carry their clubs further back



VARDON ADDRESSING.

and I stand very much more upright; my club thus describes a truer arc from the top of the swing to the end of the follow through than if I described a wider circle.

A great deal has been said in the papers about my method of approaching. It is perfectly true that I always run a ball in preference to pitching it, if the nature of the ground permits; as it is very much easier to simply have to calculate the amount of strength to put

behind a ball to roll it a certain distance than to have to gauge the strength required to pitch a given distance and allow for the roll after, especially as it is very frequently impossible to tell whether you are going to pitch on an exceptionally soft spot or vice versa.

I consider putting, next to the mashie approach, the most important stroke in golf. I always carry two different kinds



VARDON'S GRASP.

of putters and I have several different stances, and if I find I am off with one putter I try the other and keep altering my stance until I feel perfectly comfortable; for without this feeling you can not have confidence, and without confidence good and accurate putting is an impossibility.

The expression "a wrist shot" is to me an absurdity; there is no such thing as a wrist stroke alone. In all my so-called wrist shots I make the arms and the wrists act together, but I do not turn my wrists back. My left arm is almost straight, and my right elbow is close to my side and my right forearm is held stiff. It amuses me very much to hear people remark when I place an approach shot close to the hole, "Goodness gracious, what a cut he did put on the ball! He must have drawn his club clean across the ball to make it stop so dead." Now as a matter of fact, I do not put any cut on the ball with my club; but instead of striking the ground

about half an inch behind the ball and pitching it straight up, I strike the ball itself almost on the side, a little above the center, and drive it into the ground, from which it ricochets. The ground puts the cut on which stops the ball, and not the club.

I believe I am the only man who makes this stroke, and it is another of the instances in which I am supposed to infringe the rules of golf as laid down in the books.

Newspaper critics always say that it is my second shot which wins me the championship. This I believe myself to be perfectly true, and I will endeavor to describe how it is that I make it. The most important point, which results in long accurate playing, is the keeping perfect time between the raising of the club, after addressing the ball, to the top of the swing, and the raising of the left heel over the left toe as it pivots around. These two motions should take place simultaneously; and the downward swing and the return of the left foot to the exact position it was in when the upward swing commenced should also be simultaneous. At the precise moment when the left heel reaches the ground and the club head strikes the ball, the



VARDON'S GRASP.

raising of the right heel over the right toe commences; and it rises in the same proportion as the club rises in the follow through, until both reach their limit, which limit is the very point of your right toe. The minute that point is reached the swing is completed, and unless you allow your arms to follow

through until your toe reaches that point, you check your swing and lose distance.

In regard to my method of training, or rather, to my lack of training, I have what seems to me to be common-sense reasons for acting as I do. I am naturally a healthy man, with a good appetite, and I live about the same all the year round; I always drink whenever I feel like it, but never to excess, and I am an inveterate smoker. This mode of

living, combined with an outdoor life, keeps me in perfect health, and I consider that my normal condition is the one in which I am the most likely to play my best; my nerves are not irritated either by extra abstinence or by any sudden excesses, and I feel no more excitement when entering for a big match than I do when playing a mixed foursome, which, after all said and done, I consider the most pleasant way of enjoying a game of golf.

VARDON AND HIS IDEAS.

By Charles S. Cox.

IN writing about Harry Vardon and his style of playing golf, a most important point in my opinion is the man's temperament.

He is naturally very quiet and unassuming in his manner and gives you the idea of being phlegmatic and not much given either to study or thought; but underneath his outward appearance of "don't care much about anything" lie a very shrewd head and a bundle of nerves, which supply him with an inexhaustible fund of vitality, directly he is interested in anything.

The shrewd, common-sense style of analysis which he brings to bear upon subjects about which he knows absolutely nothing, invariably leads him in the right direction, and he seems to get to the very bottom of whatever he attempts to do or to talk about. If he had not been a golf player he would probably have been a great man in any other line of business requiring a good eye, perfect control over the nerves, and the faculty of accomplishing anything by the power of deduction.

He is supposed to infringe every known rule laid down by the best writers on golf, such as Horace Hutchinson, Simpson, and Park. As a matter of fact, I do not think he does anything of the kind: he simply supplies the missing links to the chain which they attempt to make when describing their ideas of what constitutes a perfect style when playing.

They give an idea of a swing, which no doubt is mathematically correct, but as there are no two men made alike, their ideal swing is one which very few

men can adapt to their varied styles of physique.

I have heard it frequently stated by men who have seen Vardon play since he came over here, that he drives with a three-quarter swing. Now, with a three-quarter swing, the elbow of the right arm is down, and the hands are below the level of the arm-pit, or about on a level with it, and the club is pointing up; while for a full swing the elbow is square on a level with the face, and the hands are about on the same level as the elbow. The general idea of a full swing is, that it is the length of the arc described by the club, which constitutes a full swing. This is not correct. It must depend on the height to which you raise your arms. Whether, when at the top of the swing, you allow your club head to drop until it points to the ground behind you, or whether you keep it about parallel with the ground, as Vardon does, is perfectly immaterial as far as the fullness of the swing is concerned.

The men who describe an arc, which is commonly called a full swing, are the men who hold their clubs loose in the palm of their hands and allow it to drop out of the palm into the hollow of the thumb when at the top of the swing. This is an impossibility when the club is held as Vardon holds it, perfectly tight with both hands; in such case you cannot get your club below the level of a line which is parallel with the ground.

When first Vardon became a professional he always used to grip his club with his thumbs around the shaft, and sometimes he could drive a few

holes and keep direction, but he says himself that he never had any confidence in himself; as after letting his club turn in his hand, at the top of the swing, he never felt sure when he grasped it tight again in the downward swing, just before getting to the ball, that the face of the club was at right angles to the line of direction in which he intended the ball to go.

Vardon gets distance by the tremendous rapidity with which he makes the club travel through the air in the last few feet before the lead reaches the ball, and this he does with his wrists only, which are exceptionally strong. He regularly snaps them, the same as a man does when he plays racquets, and it is this snap of the wrists which enables him to get the tremendous brassey shots for which he is famous.

He has the most sound common-sense ideas of what constitutes a perfect follow through I ever heard; and he has described them so perfectly in his own article that it is not necessary to say anything about them except to add that Taylor himself says that Vardon is the only professional in England or Scotland who has "a perfect follow through."

Mr. Herbert Leeds, who is a shrewd critic about any sport which he goes in for, remarked at Aiken that at first he thought Vardon seemed to jump at his ball, when playing for distance, but that after observing him more closely he came to the conclusion that it was

simply the way in which his arms and his feet kept perfect time with one another. This is exactly what Vardon himself says. I have seen him play with Smith, the open champion, Findlay, Low, Nicholls, Jones and Machrell; and by comparison with the wide swings they all take around the shoulders, Vardon immediately strikes you as taking a very much more up and down one. This, of course, to a certain extent is due to the very short clubs he uses, which compel him to take a more up and down swing or else crouch very low, which he does not do.

He has the most perfect judgment in regard to distance, and seems to be able to place a ball just about where he thinks it ought to go.

What really counts in his matches is his steadiness. I don't mean that he never fozzles a shot, but his fozzles probably don't average one per cent. Put him on any 18-hole course in the world, and the probabilities are that his score will not vary more than four either way, however long he plays.

I asked several men at Hoylake just recently how they graded the professionals on the other side, and the unanimous reply was that Vardon was one, two, three, four, five, six, then came Herd, Taylor, etc. Willie Park told me that there was only one Vardon, and that he himself could see no one who was likely to beat Vardon for some time to come.

WORKING PLANS FOR THE NEW YORK FOREST PRESERVE.

By Gifford Pinchot,

Chief Forester to the United States.

A PROVISION in the New York State constitution of 1895 is responsible for the thoroughly anomalous situation of the Forest Preserve of New York.

Popular distrust of the management of the State forests culminated in the adoption, first by the constitutional convention and afterward by the people of the State, of a provision which forbade, and which still forbids, the felling, destruction, or removal of any tree on the State Forest Preserve.

This prohibition, adopted purely in the interest of forest protection, is yet fully as effective a bar to practical forestry as it is to destructive lumbering. That it will eventually be removed there is no question, but probably not until, by the preparation and publication of forest-working plans, the public can be assured of what is proposed to do, how that is to be done, and what the result will be both upon the forest and upon the treasury of the State.

A forest-working plan is, briefly, a

plan for conservative lumbering, or in other words, a scheme for harvesting the crop from forest land without endangering the future productiveness of the forest. Under it the forest is considered as a factory of wood, and the working plan simply provides for the collection and disposal of the product without impairing the productive capacity of the factory. No such plan has ever been prepared for any portion of the New York Forest Preserve, although such plans are already in operation on more than a hundred thousand acres of private land in the Adirondacks.

What such a working plan contains and how it is prepared will perhaps best be illustrated by a very short description of an actual case, which derives additional interest from the fact that it was the first instance of professional forestry in the Adirondacks.

Early in December, 1896, field work began in the preparation of a working plan for Nehasane Park, a tract of 40,000 acres on the western side of the Adirondacks, belonging to Dr. W. Seward Webb. The purpose of the work, in addition to its applying to this specific tract, was "to acquire such a knowledge of the laws which govern the growth of the red spruce that the main facts necessary for the conservative treatment of spruce forests might be put within the reach of the men most likely to undertake it."

The first step, for reasons of convenience, was to ascertain something about the effect on the growth of the younger trees left standing, of cutting out the older spruce. From very careful measurements of about sixteen hundred trees it was found that about one tree in five increased its rate of growth from an average of one inch in diameter in nine years to one inch in five years. Then the stand of merchantable trees was ascertained by actual count and measurement on more than a thousand acres, and at the same time the number of trees of each different diameter was found. Then careful counting and measuring of rings showed how fast the trees of each size increased in diameter. Knowing thus the number of trees of each size per acre, and their respective rates of growth, it was then easy to find how soon, after cutting the old trees,

the younger trees left standing would replace them with a merchantable crop of a given value. In case, for example, the old trees were taken down to twelve inches in diameter the interval of waiting for an equal cut was found to be twenty-five years, and if to those of ten inches, thirty-seven years.

Upon the facts very briefly indicated above the working plan was based. It gave practical rules about the selection of trees to cut, what trees to leave standing above the diameter limit (in this case ten inches), and what to cut below it; how to cut without undue injury to the young growth, and what precautions to take in the logging. Rules and precautions alike were so simple that their observance has since been required of logging contractors without entailing any rise in price.

Under such a plan it is perfectly feasible, with favorable circumstances, either to make the forest produce an annual return, which would probably be best for the State Forest Preserve, or to make the return periodical, which will usually be most suitable at present to the needs of private owners. But these are mere details. The essential thing is that a good working plan intelligently applied secures the perpetual safety of the forest while harvesting its product.

No other forest is so safe as one protected by a reasonable use. Even the State Constitution is ineffectual against fire and thieves, whereas a forest force actually engaged in forestry is the best of all safeguards. We shall never have adequate protection of the Forest Preserve in any other way, to say nothing of the net revenue which the State might better than not be receiving from its forest lands.

The preparation of working plans for conservative lumbering and their publication and discussion—followed by the repeal of the constitutional prohibition and the introduction of practical forestry on the Forest Preserve in accordance with these plans—are, in my judgment, the steps to be taken before forest matters in New York can make solid progress on the right road.

Governor Roosevelt's enthusiastic and thoroughly intelligent interest in forestry is the most hopeful of the many happy auguries in this direction.

OUTING.

An Illustrated Magazine of Sport, Travel and Adventure, issued monthly at 239 Fifth Avenue, New York City, by The Outing Publishing Company.

CASPAR WHITNEY, President and Editor; ROBERT BACON, Vice-President; FLETCHER HARPER, Secretary and Treasurer. Advisory Board—C. C. CUYLER, S. R. BERTRON, S. F. HOUSTON, T. D. M. CARDEZA, CHARLES HODGMAN, DAVID M. GOODRICH, WALTER CAMP.

THE MONTH'S REVIEW.

By CASPAR WHITNEY.

This is the season in which it is unlawful to kill or have in possession quail, grouse, wild duck or venison. Restaurants which serve this game are liable to legal prosecution and fine; and people who eat it abet the work of the game butchers and defeat the efforts sportsmen throughout the country are making to provide needful protection for our game birds and animals.

Plans and Policy.

In offering the greetings of OUTING's new management to the readers of the magazine, the occasion seems peculiarly fitting for some disclosure of future plans and editorial policy.

Rather, however, than burden our friends with a full recital of the programme arranged for their reading, we prefer the magazine shall each month tell its own story of development. With that end in view, we refer to the announcements elsewhere in the present number, as suggestive of the promised quality, and merely add here that it is our intention to develop OUTING to the utmost limits of its especial field. Every branch of sport will be discussed by experts, and tales of travel, adventure, exploration, hunting recounted by those best qualified to instruct and entertain.

Concerning editorial policy, our declaration is brief and significant.

OUTING will seek, first of all, to nourish the out-of-door spirit which has spread so happily throughout the pres-

ent generation of Americans. It will strive to bring its readers closer to nature, and to awaken in them an appreciation of the need for preserving our dwindling forests. It will use its unceasing endeavors to arouse an intelligent interest in bird and animal life, and kindle a desire for their protection; it will foster the sentiment which responds to the chirruping birds and the budding trees of awakening spring. It hopes to bring into the work-a-day lives of its readers the smell of the forests, the song of the sea, and the spell of the wilderness.

What Outing Stands For.

We believe the healthful mind to be a not invariable, perhaps, but most frequent corollary of the healthful body. We know that sport in its widest sense is a great broadener of views and a destroyer of prejudices; that it quickens the best instincts in men, and, if followed in the proper spirit, is a mental and moral stimulant as well as an essential to physical well-being. There-

fore it is an important factor in training young men for the best citizenship.

OUTING will uphold with all its force that wholesome life which sport, travel, and adventure bring us.

Finally and definitely OUTING will stand unwaveringly for:

Sport for sport's sake ;

The protection of game ;

A national law prohibiting the killing at all times of song and other birds which are neither game nor pests ;

The preservation of our forests.

The divorce of politics from game, fish, and forest commissions.

We shall spare no effort to reveal the game butcher, or the dishonest sportsman, whether he operate in the woods, on the water, or on the general athletic field.

We believe in the strenuous life.

We believe in the thrill which comes from honorable contention for victory, nor wish a victory without that thrill. And we ask sportsmen to aid in spreading these sentiments.

A Non-political Forest and Game Commission. Governor Roosevelt, with habitual directness and vigor, has taken up the question of forest preservation and game protection in a manner so

practical that, for the first time, there really seems hope of New York's acquiring a Forest, Game, and Fish Commission which will approach its work from the sportsman's rather than from the politician's viewpoint. The value of such an innovation to the people of this State cannot be overestimated.

Not the value in ethics alone, but in dollars.

One of the most satisfying signs of the times is the awakening of people generally to the particular and individual benefit accruing from the protection of game and the preservation of the woods. Impression has ruled strongly among the less enlightened that game protection is a matter in which they have no possible concern and is agitated by sportsmen for their own benefit. Curiously the farmers, who as a rule are rather alive to the main chance, have been not only the most obstinate in clinging to such a misconceived notion, but the most persistent enemies of game protection. Curiously, I say, because the farmer, accepting him as the predominant type in the country, is, per-

haps, more directly concerned than any other class in the protection of bird and fish and animal life and in the preservation of forests.

What is sport to the sportsman is dollars and cents to the farmer, and many of the latter are beginning to realize that one covey of live birds in their county is worth a great many hanging in the butcher's shop.

But the offenders in whom there is neither sympathy with bird and animal life, nor respect for law or sentiment, are the dealers—including the cold-storage warehousemen—and the timber contractors. In the interests of these two industries, agents are ever plotting and ruthless and liberal; hence the eagerness with which appointments to the Game and Forest Commission are sought by political bosses for useful henchmen.

There has never been a desirable adjustment of the game and forest questions or a commission of satisfying personnel in this State. Deals with lumbermen, indifference to broken game laws, and devastation of public land have been patent and scarcely denied. The past Commissions have been listed with the spoils of political victory and officered accordingly.

Among Governor Roosevelt's appointments sent recently to the Senate for confirmation are men in whom the State may repose confidence: W. Austin Wadsworth, of Livingston county; Percy S. Landsdowne, of Erie county; Delos H. Mackey, of Delaware county; B. Frank Wood, of Queens county, Dewitt C. Middleton, of Jefferson county.

With Mr. Wadsworth in the chair, we shall have no more political jobbery in the Adirondacks.

A Better Sentiment Spreading. Thus, with realization of its value as an investment pure and simple, impelling urban respect, and with sportsmen pursuing their efforts unwearily, the sentiment for game protection is actually spreading in the land. How much of this may be attributed to individual cupidity need not concern us. There is ample satisfaction contained in the result, without probing too deeply for the incentive.

Certainly the continuous agitation of the subject is having the wholesome dual effect of educating the public and of lessening opportunities for dishonesty

among game wardens. This State and every other one with which I am familiar appoints too few wardens in the first instance, and, in the second, employ men utterly unsuited for an office which demands peculiar and unquestioned fitness.

No measure short of the absolute divorce of Game and Forest Commissions from politics, such as Governor Roosevelt proposes by the appointment of his new commission, will ever guarantee an average of trustworthy and competent men in this most important office.

With trustworthiness once established in this quarter we may proceed to the improvement and codification of our present verbose laws.

Simpler Game Laws Needed. The present laws, speaking generally, are inconsistent in provision and involved as to phraseology. I need only cite the "original package" clause, which permits the importation of out-of-season game, but forbids its sale in broken lots. Experience teaches that the attempt to control the distribution of the "original package" is well-nigh hopeless. To simplify our game laws is, next to honest administration, perhaps the most important step toward game protection.

If a national congress of sportsmen representing all the States of the Union could be assembled, something practical in this direction might be accomplished. Meantime individual sportsmen and their various leagues and associations are concentrating their energies on improvement in their respective States.

The North American Fish and Game Protective Association, organized at Quebec in February, by the sportsmen and game commissioners of the neighboring States and Provinces, is another praiseworthy move to the end of wider and more harmonious action. There is no reason why the objects sought by these sportsmen organizations should not eventually secure governmental recognition and aid.

Against Song-Bird Slaughter. As to the menacing influence exerted by politics in the strife for protective legislation, a present bill at Albany provides a telling illustration. This is a bill drawn for the protection of song and other birds, and one so righteous as to have favorably impressed even our

State Senate. Yet determined opposition, to including gulls and terns, came from the Nassau County member, because, as was disclosed, the gentleman has a friend on Long Island in the business of furnishing milliners and others with gull feathers. Incidentally, I may add, by way of showing to what extent this slaughter of birds is carried, that recently this Long Island gull-catcher's warehouse was destroyed by fire, with 10,000 gull-skins, together with thousands of rarer ones from Florida and the Gulf!

It looks now as though Mr. Hallock's bill, shorn of protection for gulls and terns, would become the law.

And let us accept the revision and be thankful for at least so much. I am one of those who believe in adapting one's assault to the tactics of the opponent; of holding on in a righteous cause to all one can get, while the fight for more is pressed—rather than giving up altogether because your full purpose cannot be accomplished. Honest legislation for game and forest protection is not to be attained without a prolonged struggle; and if we can secure even an entering wedge, as we do with Hallock's bill for instance, by all means let us seize it.

No single feature in the great movement sportsmen are making for the protection of animal and bird life, should appeal more strongly to the people than this effort to spare our birds of song and plumage from slaughter. The present rate at which they are diminishing before the onslaught of milliners' agents is startling.

A very active destroyer of bird life is the boy with his first shot gun, who roams the fields and woods, shooting at every living thing in sight. Parents can do much for the cause by instituting a campaign in their own household.

Effective Protection. The "effete East" is sometimes given to sneering at Western methods, but I have observed that where a question of hard common sense is involved the West is usually sound and not to be shaken from its judgment.

While we are pottering around for some law to protect song birds, Arkansas has scored on the very vitals of bird slaughter by passing the following bill: "Any person who shall have in possession or who shall sell or expose for sale any feathers or skins or parts of birds for use

in millinery or similar purposes, or shall kill for such purposes any birds in this State, shall be deemed guilty of a misdemeanor, and upon conviction shall be fined not less than \$25 nor more than \$50 for each bird skin or part of skin or parcel of feathers so sold or offered for sale or killed for that purpose."

The East needs some of this kind of legislation.

The Providence Conference. President Eliot, of Harvard, is fully justified in declaring college football to have become too costly. Nor is the thought original with Mr. Eliot, or the fact unknown to friends of university sport.

If the presidents of our leading universities will unite in practical measures to keep sport within legitimate bounds, a most important step will have been made toward tempering the extravagant atmosphere which to-day envelops university athletics. Much has already been accomplished to this end at the several universities through graduate influence and by faculty supervision, but a great deal more is promised if the report of the so-called Providence Conference is generally adopted.

The Providence Conference was the outgrowth of an effort by the more active disciples of sport for sport's sake, to formulate eligibility and other rules touching athletics, which would be acceptable to all the colleges. Each leading Eastern university was requested to send a representative, and all responded save Yale, which, surprisingly enough, failed to do so. Thus the conference consisted of Professor Hollis of Harvard, Professor Fine of Princeton, Professor Munro of Brown, Professor Dennis of Cornell, and Professor J. S. Patterson, and latterly H. L. Geyelin of Pennsylvania, and Professor Kemp of Columbia.

Frequent meetings were held, and the problems of university sport intelligently and exhaustively discussed. The result of these labors is a report of suggestions, which is submitted to the universities as a consensus of Conference opinion.

Some Excellent Suggestions.

Without going into details, the Conference agreed that the most important step toward placing college sport on its proper plane is to give the control of athletics at every university to a

responsible and continuing committee on which the faculty shall be represented. In this respect the course at Harvard and Pennsylvania was practically adopted, as was also their rule applying to amateur status.

The four-year-rule of representation, as at present in operation at Harvard, was agreed on, viz.: that the time an athlete competes for any college is to be included; as were also rules requiring athletes to maintain a scholastic standing equal that demanded of the general student.

The Conference further agreed that special and partial students are ineligible to college teams, unless taking courses requiring an entrance examination equivalent to the regular college entrance examination.

This is a rule very much needed in the West.

Furthermore, such students must also be taking a course considered equivalent to the course required for a degree. A student owing money for his share of training and table expenses is declared ineligible, and competitions must be held on college grounds.

The Harvard and Pennsylvania representatives contended for a rule requiring all games to be held on the grounds of one of the contestants; but were outvoted and in my judgment wisely, since the main object is reached by the present provision—and occasions might, and undoubtedly will, arise when the narrower interpretation would prove an embarrassment.

Among the most timely of the suggestions are the ones that all coaches must be approved by the university committee, and that in the allotment for seats at football and other contests, the students of the competing universities shall have the preference.

If the latter is accepted, there will be need for extreme diligence among faculty committeemen to prevent wholesale and scandalous undergraduate ticket speculation. Already it is carried to a disgraceful extreme.

Violated Principles. The surprising feature of the report is its failure to absolutely forbid all preliminary practice. Summer practice, to be sure, is agreed by the conference to be undesirable, and is prohibited with the exception of ten days before the first day of the term.

This is simply indorsing the principle but curtailing the practice. Its logic is on a par with declaring an amateur's standing forfeited by running for a dollar, but not forfeited if he runs for only fifty cents.

If preliminary practice is wrong in part, it is wrong in whole. If it is against the ethics of amateur sport for football men to be boarded at a hotel for one month during vacation at the expense of the university, it is wrong for them to be boarded at no expense to themselves for ten days at the country residence of an enthusiastic alumnus.

The ethics of college sport are offended, not by the length of time or the amount of expense, but by violation of the principle that makes for sport for its own sake.

When men are gathered during vacation in practice for a contest which occurs during term time, they are abandoning the broad principle of sport for sport's sake, in favor of the undesirable one of sport for the sake of winning.

An Inadequate Excuse. The excuse offered that the additional training is demanded to fit the players for the wear and tear of the very early games is mere subterfuge. If it be really true that the players are not physically fit without preliminary training for such early games, the simple solution is to shorten the schedule.

Pennsylvania had an unhappy experience last year with a long schedule, which should have been convincing of the valuelessness of preliminary practice as an offset for too lengthy schedules.

There should be no deviation from the principle which holds college sport as the recreation, not the business, of undergraduates; and there is deviation from that principle when organized practice is permitted previous to term opening for games played in term time.

This is abandoning the course of the amateur for the habits of the professional.

So long as methods are officially indorsed which suggest to the student mind the importance of winning, as weightier than the sport of the game, it will be difficult to discover sincere desire for reform in the complaints against extravagance which come from official sources.

The extravagant atmosphere which

now envelops collegiate athletics arises almost directly from the desperate and out-of-season efforts made to win.

A Reformed L. A. W. The decision of the League of American Wheelmen at its recent National Assembly to relinquish control of racing is no surprise to those who have followed intelligently the course of the long struggle between the best and worst elements in the L. A. W.

Abandonment of racing was inevitable; it was either this or eventual dissolution. Not that racing was or would be necessarily a destroying element, but because in this case it offered almost unrestricted opportunities for an active corrupting influence.

The history of American sport contains no page more remarkable than the story of so-called amateur racing under L. A. W. auspices. Perhaps more deliberate or persistent efforts to wreck good sport were never made; certainly never in this country, and the final rout of the undesirable element is the more gratifying. It adds another defeat to the long list of those which in one or another of the several fields of amateur sport have resulted from the pursuit of unwholesome methods.

It is well worth noting here and now, that without an exception every attempt which has been made in the United States to corrupt amateur sport has, unfortunately, resulted not only in harm to the game concerned, but also in pecuniary loss and final defeat to its defamers. There is hardly a branch of sport which has not provided its illustration of this patent record—baseball, boxing, track athletics, lacrosse (in Canada), bicycling, and even college football.

Some day we shall be sufficiently enlightened to realize that honesty in sport is the only policy by which it can thrive. Occasions there have been, both in club and in university athletics, where a one season's spurt perhaps has resulted from some dishonest practice; but time and again the conviction has followed swift and with unmistakable emphasis—that there is no permanent prosperity in any kind of amateur sport which is not conducted on an absolutely honest basis.

And the word honest, in my application, is not to be understood as having reference only to the financial conduct

of sport, but to its conduct along accepted and professed ethical lines.

**Honesty
the Only
Policy.**

Such an opportunity for lasting and honorable success as that which greeted the L. A. W. on its assumption of racing control is seldom given an organization. It had unlimited power for good or ill, and it chose to be first weakly good, and eventually wholly ill.

Adopting such logic as that of the Providence Conference — which, in granting ten days "preliminary practice" to football men, soothes its conscience to violation of principle by limiting the period of offense—the early Racing Boards of the L. A. W. attempted to save its best riders from being ranked as the professionals they really were, by making two classes of amateurs.

Thus there was the genuine amateur, and the class B "amateur," who rode some special make of bicycle at all the race meets, and was paid a salary and all training and traveling expenses for doing so. The only difference between the accepted professional and the class B "amateur" was in the manner and the amount of their respective rewards; the professional competed for a cash prize; the class B "amateur" received a salary for advertising a particular bicycle. Each earned his living at the game, and yet the class B man was called an "amateur" and allowed so to ride.

Such a condition led, as it, of course, always must, to corruption and open scandal, until finally official amateur recognition was withdrawn from the manufacturer's amateur, and class B was abolished. It was natural and legitimate that the manufacturers should take every advantage of the L. A. W.'s weak and corrupt administration; and so with the abandonment of openly salaried amateurs, employment on other lines equally remunerative kept a considerable percentage of this class of men in evidence at the race meets.

**Retribution
for the
L. A. W.**

There was never a time when the L. A. W. could not have separated the amateur from the professional, and purified its racing; but the genuine desire to do so was always wanting. The balance of legislative power was held by the un-

desirable element, and the League became honeycombed with politics.

How the general member viewed this state of affairs is best answered by saying that in February, 1898, the membership numbered 102,638; in February, 1899, 76,994, and in February, 1900, 51,146.

The L. A. W. elected politicians to fill its high offices, and the politicians are responsible for the league's misfortunes.

It is retributive justice.

Henceforth the League of American Wheelmen will devote its zeal to promoting the cause for which it was originally founded, viz., good roads.

And this after all is the direction towards which are turned the eyes of the great majority of those who ride the bicycle.

For every ten men interested in racing there are literally thousands that ride for recreation and are concerned in the betterment of roads and the making of side paths.

The automobile will make no appreciable decrease in these ranks. The motor vehicle, except where mere transportation is desired, will never displace the self-propelled one, any more than it will the horse for pleasure driving in the country.

So far as bicycle racing is concerned, the National Cycling Association has my best wishes. If it adheres to the policy thus far followed, it will safeguard the sport as well as could any organization which attempts jurisdiction over both amateurs and professionals.

**National
Golf
Legislation.**

Although the way of the golfing brigand has been neatly blocked on a majority of the thoroughfares where formerly he exacted toll, there are yet remaining to him several profitable avenues along which a sharper surveillance is needed than the U. S. Golf Association seems disposed to give.

Not that the Association is out of sympathy with the protection of golfers; I would not be so understood, for, quite the contrary, it has proved to be a guardian of utmost sincerity and some initiatory energy.

But the Association sometimes reminds me of a personal experience on a tiger hunt in the Malay Peninsula.

I was beating out a tiger on foot—the jungle being too dense to use elephants, as customary in India—and had about

seventy-five beaters—natives, Tamils, Chinamen—deployed in an advancing line and sounding a serenade with drums, gongs, and bombs, which I deeply hoped would cause the tiger as much mental anguish as it did me, and drive him out towards where I was posted.

In the center and at the ends of the line natives were stationed with guns, and instructed, in the presence of the entire company, to fire twice from whatever point of the line a tiger was viewed—if such good luck befell us—so that I, who was ahead between the beaters and the tiger, might get some idea of the direction he was traveling. Briefly told, the beat was long and hot and fruitless; no rifle reports reached my ears, and nothing more formidable than myriads of leeches, the pest of the dank Malayan jungles, greeted my eyes.

Subsequently, when we had made our camp for the night, it was reported to me by my interpreter that one of the beaters, a Tamil, had indeed got a glimpse of a grand tiger during the beat, but given no sign to the signal men, because, he said, on being taken to task for his negligence, it was not his business to "hunt the tiger, but only to scare him"!

Weakly While it is undeniably wise of
Good. the Association to avoid interfering with matters of a purely local significance, yet violations of the ethics of a game cannot now or ever be dismissed by a body with pretensions to national government, as simply a question of local interest.

Sportsmen are agreed that there is a point where the none-of-our-business attitude becomes distinct remissness of obvious duty. It is not enough to merely record general disapproval. Offences which affect the morale of the sport must be treated specifically and energetically. I doubt if opinions differ on the course to be pursued under such conditions. We can all recall evils in various branches of amateur sport, which have sprung up and taken firm root immediately under the noses of weakly good legislators.

Golf has become a too well beloved intimate of our sporting household for us to assume an indifference to its welfare beyond our immediate neighborhood. The health of the game in Florida, or Wisconsin, or elsewhere in our

country does concern us. So also is it emphatically the business of the United States Golf Association, if an associate or allied member breaks the spirit or letter of the rules to which it has subscribed.

**Pot-
Hunting
Made Easy.**

There are at least two abuses in competitive amateur golf which are viewed with deep concern by all sportsmen—one is the giving of prizes of considerable intrinsic value, and the other is the growing practice at resort hotels, and even at some clubs, of offering material inducements to expert and well-known players in order to secure their tournament attendance.

And both tend to augment the already well-filled ranks of the pot-hunter.

It is true that the giving of prizes of excessive value has been in a measure checked; but there is yet ample occasion for anxiety, the more so because frequent offenders are club committees, that above all others should insist on the interpretation of the rules which the Association intends and all honest sportsmen desire.

If the Association adheres to its present determination, as officially uttered at the recent annual meeting in New York, of making no direct or specific rules to reach these matters, it would seem that the future of golf—from an ethical standpoint—is to be in the care of club committees and resort hotel proprietors, rather than in the care of the National Association. Now club committees, theoretically, should be of such character that we could view with composure their extension of authority in golf, but, unfortunately, experience teaches that too many of them regard an attractive tournament entry list as of greater importance than the welfare of the game itself.

This situation is not peculiar to golf; every game has this kind of man to contend with, and it is for the purpose of restricting his scope and for the making of needed rules that National Associations are called into existence and have their value. It is decidedly their business to grapple with the problems which arise in the realm of sport over which they preside. To refrain from ruling definitely and specifically upon questions that menace the health of the sport, is for the Association to shirk its plain duty.

**Another
Revision
of Rules.**

As a substitute for those they displace, the new rules put forth at the annual meeting will be received with thanksgiving, but as a final code they cannot be considered as acceptable. This comment is not to be taken as a reflection on the work of Messrs. C. B. Macdonald, A. M. Coates, and Laurence Curtis, who composed the committee responsible for the recent revision. There was no intention by the committee to formulate an American code distinctively, but rather to clear the old St. Andrew's rules of their labored verbiage, and to interpret such parts as needed it for our players. On both counts the committee has successfully accomplished a somewhat difficult task.

Yet there is much to be desired in the way of simplification, and in fitting rules to more squarely meet the national requirements. Without at all advising radical departure from the time-honored Scottish code, I am none the less of the opinion that golf has become sufficiently established in America to be entitled to a character of its own.

There is no reason why we should, out of pure sentiment, always abide by rules so involved that discussion as to their interpretation is constantly arising among players.

There is flavor enough in the old rules to last through several revisions. Next to legislating against the pot-hunter, the question most vital to the interests of golf in America is that of sectional organization. The past year has witnessed considerable progress along these lines, chiefly due to local agitation; and if the parent body would take more active interest, the golfing division of the country on sectional lines would be accomplished within the present year. As such division finally accomplished is the only way in which the widely spreading interests of the game can be served intelligently, the Association's passive interest is somewhat surprising.

Without such division on a well-organized basis, it is certain that U. S. G. A. legislation will be utterly unable to maintain its present national significance. The time must come when the country will be divided into about a dozen sections, each with its complete organization, each holding its annual sectional championships and sending its

delegate to the annual meeting of the U. S. G. A.

On such lines will there be a genuine national body. Such honor is certain to come, if not to the U. S. G. A., to some other organization.

**The Right
Man for
the Place.** Whatever sins of omission may be charged against the U. S. G. A. in annual meeting assembled, sportsmen will at least heartily applaud its re-election to the presidency of Mr. W. B. Thomas, than whom a man more qualified for a post so important could not have been chosen.

If the suggestions given in his well-considered address to the Association are followed we shall witness a satisfactory solution to present perplexing problems.

**International
Athletics.** Although at this writing it looks as if no athletic meeting would eventuate on this side of the Atlantic, the year none the less promises to provide abundant competition between Old and New World athletes in Paris, from July 15th to 22d. The air is filled with rumors of intending departures for these games, but as yet Pennsylvania is the only university to have definitely decided on sending a team. Princeton will probably also be represented; Cornell, Columbia, and Syracuse are thinking of entering their several best men, and in the Middle West there is talk of forwarding a picked team from among the winners of the Western Intercollegiate championships.

The truth is that the securing from Paris of information concerning the games has been so difficult and the data obtained so vague and altogether unsatisfactory, that university authorities have hesitated to encourage their athletes with the hope of possible attendance. It is a fact which none regrets more than I, that the games cannot be unqualifiedly indorsed, and the reason thereof is quite a story.

**The
Paris
Games.** At the time of the Olympian games at Athens, it was decided by the able committee which had managed them, to hold the next in Paris during the Exposition (1900), and the following meet four years later (1904), in New York or London, the management to continue in the hands of the Olympian International Committee assisted by such local committee as

the international committeeman whose country had been chosen, might select.

The French representative on the International Olympian Committee was, and is, for that matter, Baron Pierre De Coubertin, who is largely responsible for what life French athletics enjoy, and favorably known to the university men of this country.

De Coubertin last year began his preparations for the management of the games by appointing a committee of sportsmen in keeping with the one that had officiated at Athens. The men whose help he secured were all among the best known in Paris, and some were royalists, so called.

After the Dreyfus trial and its attendant frenzy had fallen upon Paris, the French Government scattered De Coubertin's committee to the four winds, took the management of the games entirely out of the hands of the Olympian Committee and turned it over to the Exposition Company, whose knowledge of athletic management and intelligent appreciation of the task before them remain yet to be disclosed.

They have had at all events sense enough to beg the assistance of Baron De Coubertin, and he has been sportsman enough to give it, for the sake of good sport, despite the treatment he received from the Government.

No Official Assurance of Protection. Had De Coubertin been allowed to carry out the plans of the International Olympian Committee, the games next July would have been held on the beautiful polo field of Paris, open only to amateurs and under the auspices of a committee in whom there would be utmost confidence.

As now proposed the games will be a side show of the Exposition, held on its grounds, managed by its officers, and open to both amateurs and professionals.

Under what conditions the athletes are to compete, and who is to pass on the status of the entries, it is impossible to learn, although I have been for three months diligently seeking such information. There is no assurance from official sources of protection for visiting amateurs. Were it not that Baron De Coubertin's influence for the good may be definitely counted upon, I should strongly protest against any of our amateurs attending. As it is, visiting amateurs are sure to run risks of competition with

masquerading professionals, for while De Coubertin's good offices may be counted on, yet it is to be borne in mind that he has no final voice in the management. This is all in the hands of Exposition people.

Bungling on Both Sides. There has been bungling on this side of the Atlantic also. The Amateur Athletic Union at the very beginning lost college support through appointing as official representative a type of the self-advertising athletic impresario most offensive to sportsmen.

There was much in the newspapers for a time of the importance of this man's appointment and of the many things he was to accomplish—but in the end he antagonized both the A. A. U. and the American Commissioner-General, and literally nothing was accomplished in arrangement making.

It was eminently a subject which the Intercollegiate Athletic Association should have taken up; but the I. C. A. A. is forever missing opportunities of strengthening its position in the university world.

Thus it is that whatever athletic representation America will have in Paris will be sent by individual colleges, and neither the A. A. U. nor the I. C. A. A., the governing bodies of club and university athletics respectively, will have either voice or representation at the international contests.

This is due chiefly to the bungling which has attended French arrangements and an American lack of confidence in the fitness of the Exposition people for the management of amateur contests of such magnitude.

Those colleges which intend sending teams should keep a very watchful eye on the entry list, and insist upon representation on the Athletic Executive Committee of the Exposition. If a stout demand is made it will be granted, since the Exposition people realize that without American athletes the games will fall rather flat.

Inter-University Games. The much-discussed return athletic meeting between composite teams of Oxford - Cambridge and Harvard-Yale will certainly not be held this summer, as originally intended, and there is slight probability of a meeting being arranged for the early autumn. This is for the greater part

due to the South African war having drawn off a considerable percentage of their athletic stock and left Englishmen in no mind for athletic junketings.

To some extent, also, the certain postponement and possible abandonment are due to the tardiness of the American universities in agreeing upon grounds for the games. The contest—if ever held—must, of course, be decided on neutral grounds; it is somewhat incomprehensible that there should be any opinion to the contrary.

Somehow there are people who appear never to have opinions of any other description.

Uneasiness in the Middle West. In some respects the outlook among the leading Middle Western universities is not altogether peace assuring. The agreement by Michigan and Chicago upon a football game in Chicago for next Thanksgiving Day marked the formal ending of the "gate receipts" controversy which so stirred Middle Western university circles last autumn; but the college atmosphere seems laden with a mutual distrust, which is both obvious and ominous. It would be much more satisfying if the attitude of the leaders was such as to suggest the end of athletic boycotts, deals, newspaper recriminations, and unseemly squabbles involving not merely students and alumni, but prominent professors—even university presidents. The plain fact is, however, that, though Chicago has abandoned its professional contention for more than an equal share of gate receipts for home games, and Michigan, Wisconsin and Illinois have scheduled games with Chicago, the doubt of one another's good faith is apparent and disturbing.

Good Faith Needed. The Chicago - Michigan - Wisconsin-Illinois contentions should have administered two lessons at least.

First.—That literal good faith in one another's intentions is imperative—which of course necessitates the most scrupulous conduct on the part of the athletic authorities at each university. And second—that all institutions must stand on an absolutely equal footing in the business of arranging games. This applies to colleges large and small, for the identical reasons that theoretical equality is the only practicable basis for international law.

These are the A B C's of inter-university athletic relations and should rule at every college. Yet it is true that now, at the practical opening of the 1900 season, nothing stronger than a truce keeps the peace in the Middle West. There is always the expectation of something happening to again bring on internecine warfare.

Wisconsin was so precipitate in restoring athletic relations with Chicago as to create a suspicion that the pecuniary advantage of an exchange of games weighed heavier than the principle of equal rights, to gain which Wisconsin had joined Michigan and Illinois in a demand on Chicago. Frankly speaking, Wisconsin lost the confidence of her allies in this controversy, and may hardly be said to have gained that of Chicago. Michigan and Illinois, by insisting on the principle for which they entered the fight, should be in the strongest position; yet they, too, have been so continuously closeted as to prepare the public mind for some further rearrangements.

The Guarantee Problem. As a compromise the three institutions which declared war last year have conceded to allow Chicago a guarantee of \$1,000 for games at their home towns. It would have been so much more pleasing to sportsmen if Chicago had not made such a point of this, but it is much less than was asked at first, and is probably a step towards the disappearance of the guarantee entirely. Chicago contended, however, truthfully enough, that Michigan, Wisconsin, and Illinois themselves demand guarantees and should not object to paying them. Logically, the time is coming when other Western institutions will claim the same right. Logically and equitably, it is going to be impossible to withstand that demand.

The question will not soon present itself as a troublesome one from the smaller colleges, perhaps, which are given games for practice, and are usually pleased enough to be placed on the schedule and content with a simple guarantee of expenses. But the question will come up with reference to those institutions which from time to time are very near the leaders in playing skill, as, for instance, Northwestern, Purdue, Indiana, Notre Dame, Beloit, and Iowa, which has so recently taken a prominent rank in football.

The Unwisdom of Leagues. There is hope that Michigan will abide by her announced intention of making no agreements of any kind which involve more than one, or at most two, games with another college;—for in this is prospect of sensible and healthful competition. The day for leagues has passed; it was never a happy day, but perhaps long ago, when the games were new and rules ever changing, it had its uses. It is to Michigan's credit they are the first in the Middle West to realize that college sport is best served by distinct arrangements with separate institutions.

Involved and multiple agreements are responsible for the present restless condition of athletic affairs in the Middle West. Wisconsin appears greatly disturbed if Michigan and Chicago discuss contracts, while Michigan immediately sets watch for a danger signal if Wisconsin and Chicago get together.

With old scores settled and relations re-established, the opportunity is excellent for abandoning bad habits and entering upon a new and dignified course. Michigan, Chicago, Wisconsin, Illinois and the others should arrange games with one another in accordance with their respective mutual interests. Having agreed upon such a course, there should next follow a hunt to the death of the politicians and the meddlers, with which Middle Western University sport is at present sorely burdened.

Brilliant Racquet Play. Seldom has any country enjoyed a display of such court tennis and racquets as given during the last month. Mr. E. H. Miles, Mr. Q. A. Shaw, Jr., Mr. F. F. Rolland, Mr. Clarence Mackay, Mr. Stockton, Peter Latham, George Standing and Tom Pettit—four champions at each game and two ranking second in their respective countries at racquets—have met in matches in New York, Boston, Philadelphia, Tuxedo and Montreal.

There have been international (amateur) singles and international (amateur and professional) doubles at both games, and a quite startling average quality of play exhibited.

Interest, however, has centered upon the work of Mr. Miles, who came here as the amateur racquet and tennis champion of England, and since coming has won the Canadian racquet championship and beaten with no great diffi-

culty the very best players in America. His victory over the American champion, Mr. Shaw, was secured with notable ease, while for the Canadian honor he beat Mr. Rolland, who had just previously defeated Mr. Mackay, 15-4, 15-5, 15-7, a score which gives some idea of the facile manner in which the triumph was accomplished. It may be remembered that last year Mr. Rolland, in Montreal, won from Mr. Shaw, who had beaten him in New York.

The strength of Mr. Miles' game lies not in its brilliancy but in its consistent high quality and in his absolute control of all the strokes.

There is never a moment in the court when Mr. Miles is not playing the game for all he is worth. He is not inclined to flights of dazzling speed or witchery in placing, but he uses a service most difficult to handle, and is sure always.

There is little doubt of his adding the United States championship to his other honors when that tournament is played in New York.

Racquets and Tennis in Schools. The directors of the Tuxedo tennis court, recently opened, and perhaps the finest in the world, have builded wisely for the American game in persuading Mr. E. H. Miles to remain on this side as secretary and treasurer of the new club; for besides being an amateur champion at both racquets and tennis, he is a recognized authority on all games played with racket and ball. While tutoring at Cambridge he found time to do much writing and lecturing on the subjects; and it is hoped the lectures he is to give over here will do something towards extending the popularity of such games at our large schools and colleges, where, during long winter months, the variety of exercise is limited.

More Games Needed. Although games and sports are not to be considered of first importance at the schools and colleges, they play, and rightly ought to play, a very important part in the general development of boys and young men. Anything, therefore, that adds an interesting and stimulating form of exercise to the list, is to be commended.

From the middle of January to the first of April, and often later, our climate permits of but little out-of-door

exercise. These months are, however, the very heart of the school and college year; and one may well doubt whether court-tennis, racquets, squash tennis, and fives, would not add materially to the health and studying power of the boys and young men in our schools and colleges, of whom much mental work is required during those inclement months.

The Tuxedo Court stands, and will stand, in all probability, for a very long time, as a model of what such a building should be. It has very much the same proportions as the best English courts, such as Lord's, Queen's, and Prince's, and is modeled on Mr. Julian Marshall's ideal court. The roof is high and the light is perfect. The floor and walls are made of Bickley's cement, and are perfectly true and perfectly uniform. The club has secured the services of Ted Johnson, one of England's most promising professionals.

**Educational
Value of the
Sportsman's
Show.**

The marked popular success which annually attends the Sportsman's Shows at Boston and in New York is significant and eloquent of the spread of the out-of-door spirit.

Fortunately they are not "fashionable" in the sense that formerly the horse show was, and the dog show, I regret to say, seems growing to be; *i. e.*, people do not go to gape at other people, but to enjoy the interesting things to be seen—the remarkably complete display of paraphernalia peculiar to the many holiday pursuits of sportsmen, which the manufacturers and dealers exhibit; the mounted heads of wild, and, to some, novel game animals; the fish hatcheries; the Indian encampments; the deer; elk; bear; wolves and various game birds.

All these combine to make the educational value of the shows invaluable, and for this reason, if for no other, they are deservedly successful. To sportsmen, the show is an annual opportunity to view and study the various improvements, continually making, in guns, rods, tackle, boats, and camping impedimenta. It is a dealers' show, undoubtedly, but a good one, and one welcomed by sportsmen and the people at large.

**Home-Bred
Dogs
Win Out.**

Quite the most gratifying feature of this year's show of the Westminster Kennel Club, held as usual in Madison Square Garden, New York, was the

signal success of American-bred dogs, in many classes containing importations of unquestioned quality.

As a whole, it was a show so notable as to excite the admiration of several well-known British fanciers, and of Mr. L. P. C. Astley, in particular, the famous English judge, who has, perhaps, officiated in more bench rings than any other man living.

The competitors this year numbered 1,600, a record of itself; but the real success of the show was, in my judgment, the unmistakable interest of so large a proportion of the spectators in the dogs themselves.

This increasing interest of the people in high-class dogs marks, more surely than any other external sign, the development of an intelligent sympathy with dog breeding, as distinguished from the mere devotion to pets. American breeders have good occasion for congratulation when undisputed authorities pronounce their cocker and field spaniels and beagle classes superior, and the pointer and setter classes equal, to those of England.

**Yachts Legislated
Out of Service.** There is no doubt that yacht club committees should approach the subject of rule changing with great caution, and make no alterations that cannot be continued several years.

The Yacht Racing Union of Long Island Sound deserves praise for what it has accomplished in the past. In arranging separate dates for the events on the Sound, and thus abolishing the evil of yacht races held on the same day, when there would be neither boats nor enthusiasm enough to go round, the Union has done well.

In the framing of measurement rules, however, it is open to criticism. Yachtsmen should have a run for their money, especially as the second season of a boat is the one to reveal her true merit.

If a boat is built to sail in a certain class, in conformity with the rules of any racing organization, it is only fair her owner should have an opportunity of learning her real worth. For that reason a rule defining the measurement and scantling of a racing yacht should endure for at least three years. Only men of wealth can afford a new racing machine every season, and it is true that capitalists have done much for the sport, but the rank and file are its real main-

stay. Mr. Hazen Morse owns the 21-foot raceabout *Kittie*, built to sail under the rules made in 1898. These rules were radically changed after being in existence only one season, and *Kittie* hopelessly outclassed, unless altered at great expense, so as to fit into what is practically a new class.

It should not be forgotten, however, that the rules of the Y. R. U. are made by the representatives of the clubs composing the union. Therefore, members must be careful to elect delegates who have some practical knowledge of the subject. Rules should be made in the interest of boat-owners, and not of designers, builders, or brokers.

A A surprising amount of excitement appears to have been created in and about Boston town by the withdrawal of the Quincy Yacht Club from the Yacht Racing Association. Eastern yachting owes so much to the intelligent activity of the Association, and the Quincy Club has hitherto conducted its affairs in so sportsmanly a manner, that the news of their separation suggests difficulties most serious.

Yet as an outsider I fail to discover any question involved which is not comparatively simple of solution or real justification for the Quincy Club's action.

The withdrawal of Quincy from the Association was no doubt as much of a surprise to the majority of that club's members as it was to Eastern yachtsmen generally, and I look for their re-application to membership.

The Association includes about every club in Massachusetts, except the Corinthian, which gives races for boats under thirty feet.

Under its rules all open races are grouped, for the excellent purpose of permitting one entry, one racing number, one measurement, one measurer, one system of classification, one set of racing rules—with the right of appeal by each yacht to the Executive Committee—and of securing a schedule of

non-conflicting dates covering the coast from Cape Cod to the New Hampshire line. The advantages of such conditions to the owner of a racing yacht are obvious.

What the Y. R. Association has done. In addition to these reforms, the Association has also abolished the time allowance, and supplemented the old classes by new ones restricted as to construction, accommodation, ballast, and sail area. This feature of the Association's work has been opposed forcibly by the vested interests.

Although two years' notice was given of the abolition of time allowance, a number of old boat owners—who thought they had a chance to win with time allowance, although they really had none whatever—felt aggrieved. The restricted classes have been received so favorably that practically no new boats are built for the unrestricted ones, and, therefore, the few men who own or would like to build unrestricted boats find no competitors.

Now it happens, unfortunately, that a large proportion of those—say a dozen—who have grievances are members of the Quincy Club, and further, that the judges of this club apparently believe in a heaven-born right to set aside rules whenever they deem such action advisable. And it also happens that on several occasions the Executive Committee of the Association has found it necessary, interpreting the rules, to overrule, not without worthy reasons, the decisions of the judges of the different clubs.

The whole matter has received unwarranted attention because of sensational newspaper treatment embodying statements reflecting upon the Association and its officers. Neither club nor Association will profit by the dissolution; the action was unwise, if not hasty, and the sooner the reunion is complete the better for all. Certainly the Association can view the separation with more equanimity than can the Quincy Club.

THE UNIVERSITY ATHLETIC OUTLOOK.

AN UNUSUAL NUMBER OF CANDIDATES AT YALE.

THE new régime and the energy of Captain Johnson and Manager Dana, at Yale, have turned out the largest number of candidates for the track team in the history of

that sport at New Haven—the last twenty names bringing the total close up to the 250 mark! The result of this wider distribution will be to place in Trainer Robinson's hands a better average grade of material than has been

on the early spring track since the days Yale won the Intercollegiate championships.

Of the old men who were point winners in either the Harvard-Yale dual games, or at Intercollegiate championships, there are some fifteen, although it is not positive all will compete. Adams, the half-miler, is the most prominent of the men who might be, but is not, counted upon. He has said he will not run this spring, and has become a crew candidate, where his services are not needed as they are on the track.

None other of the point winners has deserted the track, and there will be in the 100, Blount, who is one of the fastest men in any of the universities for two-thirds the distance, and good enough in '99 to win in the dual games, but who strained a tendon at the Intercollegiates. In England, he showed to the front for considerably more than half the distance, but faded off at the finish.

In the 220 and 440 Boardman is Yale's standby, and should he take training better, learn to get off his mark more sharply, and acquire something of Burke's steadiness of carriage, he will be a hard man to beat. Left over of the point winners in the 880 are Ordway, Brennan, and Richardson—all good average performers, Ordway carrying rather too much weight for the distance, some of which he might spare to Brennan. Luce is another old point winner who will go into the 440.

In the hurdles, there is Fincke, who for a new man performed most creditably in the dual contests last year, and showed much promise in contesting for a place on the American team in England. He is rather heavy in the leg and not as long in the stride as we fancy our best men—Kraenzlein, Fox, and Chace for instance. In the mile, Smith and Speer are back again—both point winners of last season. Smith (now ill) is a peculiar performer and liable at any time to run a remarkable race; Speer is moderately strong at the distance, but in fast company likely to be outpaced.

In the pole vault there are Johnson, Hord, Adriantz, point winners in last year's games, while in the weight events are Francis and Robertson, neither one likely to trouble such a star as McCracken.

Other most promising men who have competed before, and should make a better showing this year, are Beck, in the hammer and shot, Dupée, in the 100 and 220, Cady in the broad jump, Chittenden in the mile, Pointer in the 880, Taintor and G. Smith in the high jump, Mead in the low hurdles, Chisholm in the broad jump, Dudley in the 220, and Richards in the weights.

The most promising of the new material are Duval in the high jump, Thomas in the hurdles, Parkhurst, Waldron and Teel in the long-distance events, Brown, Stillman, Clark, Hale, Alcott, and Sharpe, in the weights.

MUCH ACTIVITY AT HARVARD.

Harvard has never lacked activity in the early spring track season, but the enthusiasm of last year's victories, together with settlement upon an established rowing policy, appear to have unusually aroused the student body and prompted such response to the call for candidates as has not before been seen at Cambridge. Thus it is that, though several of the '99 teams' most dependable point winners are missing, the outlook is pleasing.

Harvard's track athletic policy has always been excellent, each aspirant receiving individual attention, the less promising fully as much as the more so, until within two or three weeks of the dual games. In this way about two hundred and fifty men have annually received springtime coaching, and by such measures have the resources of the university been developed. It often happens that a man who has not shown form above mediocrity in his freshman, even sophomore year, finally becomes a point winner. Perseverance, love of sport, and a readiness to be instructed, are a combination which often transforms a seemingly unlikely candidate into a star.

This suggests the thought that to handle a man who has attained some interscholastic honors is frequently more difficult than to handle a novice. Certainly in no sport more than in track athletics does success depend upon preliminary grueling. Therefore, the more need that men come out for the early spring work. Too often at Harvard and other universities the point winners of the previous year are very tardy in reporting for duty.

Harvard enters upon her season with twelve athletes who won points in the dual games with Yale, and six that won points at the Intercollegiate championship. These include Hallowell, for the hurdles; Daly, broad jump; Rice, high jump; Boal and Brown, shot and hammer. Besides these there are also Bush, half mile; White, mile; Converse and Warren, hurdles; and Rotch, high jump, who were placed in the Yale games. Yet Harvard's loss is severe, for among the absent are Quinlan (sprints), Morse, Fox (hurdles), and Burke (middle distance), the four most consistent performers of Harvard's '99 team.

That these men will be most difficult to replace is obvious, yet there appears to be a law of supply and demand even in athletics, and a care-

ful study of the prospects seems to suggest that the team of 1900 will about equal in all-round strength that of 1899.

There are some very likely men among the newcomers. Sprague ought to prove a worthy successor of Quinlan. He comes from St. Paul's School, Garden City, and in one afternoon last season ran in competition 100 yards in 10 1-5s., 220 yards in 22 1-5s., and a quarter in 51 4-5s. There is also a pole vaulter of promise—Bonty—who cleared 10ft. 9in. last year; but there is no great prospect of materially increased strength in this direction.

There is a promise of a fair performance in the shot by Speare, who is eligible this year and already has a record of 39 feet. Campbell, the clever football end, has taken up the weights and is doing fairly at them. Effort is being made to induce Whitman, the lawn-tennis champion, to join the track team, and if so Harvard will be considerably strengthened in the middle distances, for last year, with three or four days' training, Whitman did a quarter on a very windy day in 56 seconds, beating out some of the men who afterwards represented Harvard in the Yale games. Whitman has a good stride and lung development, and is in excellent condition always. If he can sacrifice some of his lawn-tennis work he will be an important valuable addition.

Although there are several of last year's squad—Dean, Bush, P. L. Fish and Winslow—the outlook in the middle and long distances is not very promising.

BRIGHT PROSPECTS AT PENNSYLVANIA.

Pennsylvania enters upon the season in possession of the most valuable of last year's point winners, and an unusual number of new men of promise. Of last year's men there are Kraenzlein, McCracken, Hare, McClain, Grant and Remington. Remington is showing very much greater speed than in 1899, and bids fair in the hurdles to be an able supporter of his famous college mate, Kraenzlein, while showing so much of his brother's form in the broad jump, that it would not be surprising if he approaches 23ft. this season. Of Kraenzlein, it need only be said that he holds his wonderful form in his specialties, and there is some disposition to put him in the sprints. McCracken will undoubtedly finish the season with new records to his credit. Already he is putting the shot 44ft., as against 39 and 40 at this time last year; and he has hurled the discus 130 ft. 6in., which is more than 8ft. beyond the world's record of 122ft. 3 1-5in., made by L. P. Sheldon. This performance not being in competition, however, will not receive official recognition.

Pennsylvania has really a remarkable lot of strong men, in McCracken, Hare, Wallace, and Teas. Hare is already two feet better in his shot-putting than at this time last year, and it looks as though he will equal the present discus record before the end of the season.

The new men are nearly all freshmen—the most promising of whom seem to be Smith, who won the scholastic 100 at the Princeton games last year; De Armond, the Philadelphia interscholastic 100-yard champion; Earley, who won the interscholastic quarter in fifty-three seconds, at Princeton; Gillander, who gives promise for the mile; Stewart, who has a style very much like Alexander Grant; Bowden, who comes from Providence with some interscholastic reputation; Climson, who played on the Philadelphia cricket team in England last year; and Brown, who pitched for the baseball team last year, and has a style quite like that of Jarvis.

Among the pole vaulters, Colket ought this year to nearly reach 11 feet.

Pennsylvania with greater facilities for indoor track athletics than any of the other universities, has given much attention to these events this winter, holding regular weekly handicaps. The indoor 220-yard lap cinder track, with its 100-yard straightaway, gives an advantage for training which the other colleges do not possess. It seems to be a fact, too, that, while indoor work on gymnasium tracks is a harm rather than a benefit to a great many men, the practice on a cinder track, which though in a sense indoors is yet open, does not possess the disadvantage of a gymnasium track.

Following somewhat the inter-college competition at Oxford and Cambridge, Pennsylvania has arranged for inter-department and class championships, with point winners to compete for department championships.

On this line, teams have been organized in all the university departments, and in the end will accomplish for track athletics what inter-class and inter-department competition has done for football and rowing.

ENCOURAGING AT PRINCETON.

At Princeton the arrangement of dual games with the University of California, and the prospects of a trip to Paris, have stirred the athletic management to unwonted activity. The present outlook is for a team strong in the track, but somewhat weak in the field events; though it looks as if the team would, from an all-round viewpoint, be quite up to that of '99.

Bottger is the chief loss—and a considerable one—since he was the main dependence in the

shot and broad jump. On the other hand, however, Princeton has gained Serviss, the Brooklyn schoolboy, who already has a high jump record of 6ft. 2½in. As Carroll is among those of the old team retained, Princeton will be strong in this event. There are no especially promising candidates for the hammer.

On the track Princeton without losing any of last year's point-winners has gained several new men of whom good work is expected.

The old men include Jarvis and Cregan, unquestionably among the fastest in their specialties—sprints, half-mile and one-mile—of college athletes; Hutchinson for the hurdles, and Palmer for distance events.

The numbers are not impressive, but the quality is undoubted, and with Wheeler, Chamberlain, Perry and Batchelder, a fairly strong team should result.

THE NEW ORDER OF THINGS AT COLUMBIA.

Columbia will have no such unhappy experiences this year over the ethical status of her teams as last year befell her during the football season.

As those who best know the character of Columbia's faculty and graduate advisers had confidence in a complete overhauling of athletic provisions, and the adoption of new rules, those recently put in force are practically the ones suggested by the Providence Conference, and praiseworthy in every particular.

As I was sincere in my criticisms last autumn, so now I am equally so in commending Columbia's new course and in congratulating faculty and graduate advisers upon their good work and the undergraduates upon their prompt recognition of the only direction in which lies satisfactory or permanent prosperity in amateur sport.

The general athletic activity at Columbia this spring is beyond all recent precedent. With a number of last year's men returned and a large squad of new candidates, prospects are bright for the most satisfying track year Columbia has had since the days which knew McIlvaine, Collis, and the Mapes boys.

CORNELL.

Track athletics at Cornell, so long subordinated to crew and football, have this year reached a prominent place in undergraduate interest, and indications point to the most successful season in the university's history. The energy with which Moakley has taken hold of the coaching, the cross-country victories last autumn in the Intercollegiate meet and against Yale, the excellent showing recently made by the relay teams at Boston and New York, and the strong probability of a Cornell team being

entered in the games at Paris next July, have acted as keen incentives.

The result is a surprisingly large number of candidates for the track team.

Among these are Torrance, '99; Sweet, '01, and Berry, '01, whose records in the two-mile average approximately 10m. 5s.; Bellinger, '02, doing the mile close to 4m. 30s.; Hastings, '01, the quarter in 50 2-5s., and who shows still greater promise in the half; Alexander, '01, in the discus throw; Captain Deming, '00, and Kinsey, '01, with pole-vault records of 11ft. 2in., and several sprinters, hurdlers and jumpers capable of development.

The track schedule is the largest yet attempted. It includes entries in the Pennsylvania Intercollegiate relay meet on April 28th; a dual meet with Syracuse at Syracuse, and a triangular meet at Albany with Columbia and Williams, early in May; the customary dual meet with Princeton at Elmira on Memorial Day, and representation in the Intercollegiate Championship. During the winter season indoor meets have been held with much frequency in an armory.

BROWN.

Although Brown was fourth in the N. E. Intercollegiate track championship last year to Bowdoin, Williams, and Amherst, there is a feeling at Providence that this year a very much better showing will be made, howbeit there are no substantial facts thus far upon which to base that confidence.

Of New England Association record-holders three have returned—D. C. Hall, half mile (2m.); A. L. Wright, mile (4:24 3-5); J. G. Melendy, shot (38ft. 11 in.). There are also Brown and Greer, and several candidates who are expected to strengthen the mile, shot, and pole vault. Athletics have been much encouraged by the students' self-imposed tax of three dollars for the purpose of meeting any deficit in running expenses. This movement has been the means of putting track athletics on a solid basis—something of a novelty at this New England university.

IN THE MIDDLE WEST.

Chicago, last year's western Intercollegiate champion, begins the season with the loss of three of its 1899 point winners—Smith, mile; Byrns, high jump; and Hirschberger, pole vault. But this loss is insignificant, considering that of the champion team eleven have returned—Captain Moloney, Fred Moloney, Mortimer, Brown, Trude, Goodenow, Wright, Schmahl, Burroughs, Parker, and Manning; besides whom there are eight athletes who, while not members of the 'varsity, have yet won points in the dual meets.

Of these men, Captain Moloney has a record of 49 3-5s. for the quarter, and 2m. 1-5s. for the half-mile in competition, though he is credited with 1m. 57 3-5s. in practice. Fred Moloney did 16 4-5s. in the high hurdles last year and has improved much. Burroughs is said to have done 100 yards on several occasions in ten seconds, in fact, in his heat of the W. I. A. A. A. meet last year.

With this array, it is not improbable that Chicago will decide to send a team to the Pennsylvania relay races.

Chicago lost some of its candidates by the new scholarship rule which forbids unclassified students competing upon first entering the university. This is a rule hitherto much needed at Chicago and is wisely made. There is also promise of a scholastic rule being enforced more rigidly than last year.

MICHIGAN.

Michigan, which finished third in the Western Intercollegiate meet of '99, will have of its last year's team: Captain J. F. McLean, who it is said has done 15 3-5s. for the high hurdles and 25 1-5s. for the low, and 23 ft. in the broad jump; C. F. Teetzell, with a claim of 50s. in the quarter mile and 22 2-5s. for the 220-yard dash; Westfall and Neupher with records of 10 1-5s. for 100 yards; Hayes, half mile, 2m. 01s.; and Wood, one mile, 4m. 38s.; Amery, hammer, 122 ft.; Flanneg and Armstrong, pole vault. The only new man to yet show promise is D. Vorak, who has pole-vaulted 10ft. 10in.

WISCONSIN.

Wisconsin finished fourth in the Western intercollegiate meet last year and has a large percentage of its old men returned, including Fox, McGowan, and Gust, in the sprints; O'Dea, Schule, and Beebe, in the quarter mile; Stevens and Burdick, in the half mile; McFarlane, Coles, and Bachelder, in the mile; Hughes and Meyer in the jump, and Cochems in the shot. None of the old men of promise in the hammer, pole vault, or broad jump, have returned, and among the new ones, while the material is fair, there is no suggestion of a point winner. The Middle Western colleges have not been able to get the usual early spring out-of-door practice because of belated winter weather.

MINNESOTA.

Minnesota has not made much of a showing in track athletics for several years, but the present one seems to offer more encouragement. A number of old men are back, some of whom have fair records and hold out hope of improving them. Besides these there are a great many new men of promise. The majority feeling in that section expect local records to be

considerably bettered before the season is over. In a word, a considerable effort is being made at Minnesota this year to rejuvenate athletics.

NEBRASKA.

At Nebraska the prospects are also excellent, A. D. and W. E. Anderson, Brew, Wallace, Heartt, Waterman, Hewitt, Pepoon, Mantz Mauck, Cowgill and Root, of last year's successful team, having returned. The most important meets will be, as usual, with Kansas and Iowa. Last year Nebraska won 11 out of 13 firsts with Kansas, and tied Iowa. The prospects are that the meet this year with these universities will in the former case be closer than last year. To Nebraska is due the credit of encouraging and finally establishing interscholastic competition. The league which was organized in Dec. '98 with seven high schools now has twenty-three.

UNIVERSITY OF CALIFORNIA.

The athletic situation here is most hopeful, the only difficulty being that the university has no proper competition outside of Stanford because of a wise objection against competing with the athletic clubs, which are strongly flavored with professionalism. It has been decided not to employ any other than graduate coaches in football, that is graduates of California, after 1902. It is possible indeed that the new system may be inaugurated sooner, and certainly, in due season, this plan is to be extended to all sports.

At present there is no serious difficulty regarding coaches outside of football. The real reason for the change is the abnormal expense involved in the employment of Eastern coaches. For instance, California's coach last year received \$3,100 for his services, \$2,500 paid him under the original contract, and \$600 for remaining with the team until after the game with the Carlisle Indians. This is extravagance indeed, yet I learn that Michigan, in its unwise desire to "accomplish something" this year, has gone into even higher figures in the engagement of the same coach.

There is decidedly a growing sentiment among the California students in favor of sport for its own sake. The atmosphere in general is quite as healthful as that in the East, but needs constant appeal to be kept in motion and purged of miasmas.

California will send its best team East in May, not because it is an unusually strong one, but because these occasional trips East bring the men into comparison with Eastern men, and relieve a little the isolation which their location entails.

It is intended that California be represented at the Eastern Intercollegiate Championship once every five years.

GOLF.

THE ANNUAL MEETING OF THE
U. S. G. ASSOCIATION.

THE fifth annual meeting of the United States Golf Association, in New York on February 28th, brought to light the simplified code of rules, on which Messrs. C. B. Macdonald, A. M. Coates and Laurence Curtis have been working, and which will go into effect with the publication of the Association Annual Book for 1900.

Among the definitions the first makes clear the difference between match play and medal play.

Then follows the official definition of Bogey play :

"Col. Bogey" is an imaginary opponent, against whose arbitrary score each competitor plays by holes ; otherwise bogey competitions are governed by the special rules for stroke competitions, except that a competitor loses the hole ;

When his ball is lost ;

When his ball is not played where it lies except as otherwise provided for in the rules.

Section E of the first rule, defining a hazard, is extended so that "any permanent obstruction of the course is a hazard."

Rule 2 is added to, so that on playing a ball outside of the limits of the teeing ground in match play the ball may be at once recalled by the opponents, no stroke being counted for the misplay, but in medal play disqualification is entailed.

Rule 3 is modified to the extent that there will be no penalty for a ball moving while the player is making his upward and downward swing, unless the player be deemed to have caused it to move. In that case he loses at stroke in both match and medal play.

The penalty for the removal of loose impediments is reduced to one stroke instead of a hole for the first and two strokes for the second instance, excepting when through the green; then if the impediment is more than a club's length from the ball, the revised code applies.

An exception is made to rule 11 that where a ball lies on or within a club length of a drain cover, water pipe or hydrant, it may be lifted and dropped without, as near as possible to the place where it lay, but not be placed any nearer the hole

That there may be a perfect understanding of the exact language of rule 13, we give the rule and the U. S. G. A. ruling in full

13. When a ball lies in or touches a hazard, nothing shall be done to improve its lie; the club shall not touch the ground, nor shall anything be touched or moved before the player strikes at the ball, subject to the following ex-

ceptions : (1) The player may place his feet firmly on the ground for the purpose of addressing the ball ; (2) In addressing the ball, or in the upward and downward swing, any grass, bent, whin, or other growing substance, or the side of a bunker, wall, paling, or other immovable obstacle may be touched ; (3) Steps or planks placed in a hazard by the Green Committee for access to or egress from such hazard may be removed, and if a ball be moved in so doing, it may be replaced without penalty ; (4) Any loose impediments may be removed from the putting-green ; (5) The player shall be entitled to find his ball as provided for by Rule 30. The penalty for a breach of this rule shall be the loss of the hole.

Penalty—In match play, loss of the hole, in medal play, two strokes.

The interpretation of this rule will present more difficulties, probably, than any of the others. Already quite a controversy has been raised, and Mr. Laurence Curtis has given his opinion in reply to the question whether "Under Rule 13 a club may be soled on scattered grass in a hazard?" by answering No!

Rule 15 is modified to the extent that if the water in a recognized water hazard overflow its usual boundaries the overflowed portion of the course shall be considered as part of the hazard, and not as casual water.

A useful provision is made to rule 16, whereby, if a ball be not dropped in accordance with the rule, the U. S. G. A. decides that at match play the opponent may call for the player to drop again ; if the request be not complied with, the player shall lose the hole; but in medal play the ball must be dropped again or the competitor be disqualified.

In regard to taking mud off a ball in play and other such matters, they are left at match play to the mutual understanding between the competitors in the proper spirit of the game.

A very useful prohibition will go into effect in medal play, so that hereafter on the morning of a stroke competition a player may not play onto the putting green.

The following officers were elected unanimously, as submitted by the Nominating Committee, W. H. Sands, S. L. Parrish, and A. L. Ripley :

President, W. B. Thomas, Brookline ; Vice-Presidents, John Reid, St. Andrews ; H. C. Chatfield-Taylor, Onwentsia ; Secretary, R. Bage Kerr, Lakewood ; Treasurer, S. Y. Heebner, Philadelphia Cricket ; Governors, A. M. Coates, Newport ; Horace Russell, Garden City.

The Amateur Championship was awarded to Garden City ; the Women's Championship to Shinnecock Hills, and the Open Championship to Chicago, on dates to be hereafter determined.

ROD AND GUN.

THE BLUE RIBBON OF THE TRAPS.

THE Grand Prix du Casino, which has been aptly termed the "blue ribbon of the traps," inaugurated in 1872, was won the first time by the late George Lorillard, the only American who has succeeded in carrying off the coveted trophy. Since then the most expert of our amateur trap-shots have met the best marksmen to be found in Europe; and men who, judged by their work here, had seemingly forgotten how to clean miss a pigeon on the home grounds, have failed upon the famous foreign islet. But the long sea voyage and the novel conditions are handicaps quite sufficient to account for it.

This year the prix was won by a Spanish nobleman of Irish descent, the Count O'Brien. His score was 18 out of 20 birds, which, considering the class of birds, the difficult conditions, and the company which the winner had to meet, is excellent work. To win at Monte Carlo is no easy task. The strongest and fastest birds obtainable are used, and these must be centered every time to stop them within the short boundary. Beyond all doubt, the sport at Monte Carlo is the most difficult of all trap-shooting.

FISHING.

The tyro angler in buying his outfit should select a firm of reputation from whom the purchases are to be made. He should pay a good price even for his first outfit, although the practice is not usually followed, upon the theory that a tyro will break rods, sand his reels, unsnood his flies and play havoc generally with his tackle as soon as he gets down to his first stream work; but if he is careful not to be alone on his first outing for trout, but in company with an experienced angler, and will restrain his eagerness, watch intently and study intelligently the methods of the veteran, he will progress in the skilled ways of the craft before his first season ends, provided, always, he is to the manner born. Nature constructs the groundwork and experience rounds up the complete angler. A master of the craft has told us, "Anglers are born, not made," but the tyro must not be discouraged by this edict. If he cannot climb to the top of the ladder, he will find pleasure as he places his foot on the first rung.

THE CLAIMS OF BAIT FISHING.

A vast amount of interesting matter has been written about trout fishing with the fly, the writers thereof ignoring, or deriding, bait as unworthy of the notice of the true angler. This

is not altogether fair, because bait fishing is not only capital fun, but upon many waters it calls for a considerable amount of skill. To properly cast a fly with dainty tackle is an artistic performance and a very pleasing one to witness; but a majority of the men who speak of trout fishing as though it invariably meant fly fishing, are not above using the, supposed to be, plebeian bait when fish are not rising freely, which is apt to be the case early and very late in the season. I have taken hundreds of trout with bait, and I am not a bit ashamed of it. After the fish is once hooked it matters little what lure he took, the play is the same.

It is quite true that much of what may be termed the poetry of trout fishing belongs to fly fishing, yet, if the bait be prose, good prose is no mean substitute for poetry. To place a bait just where it will do most good requires almost as much skill as to cast a fly. Furthermore, the man who is a master of both methods may find capital sport upon many streams that afford no facilities for the use of the fly. Upon such noble waters as Nepigon, or upon small lakes, streams, and ponds, so abundant in the Northeastern States, New Brunswick, Quebec, and the mountainous regions of the Far West, the fly may be used to advantage; but there are dozens of lesser waters, which owing to brush or other natural obstacles, forbid fly fishing as it should be, while offering no serious obstacles to the use of bait. Hence, it is my opinion that the true angler need feel no squeamishness about the use of worms, fat pork, various insects, or whatever may promise to be attractive. I have used every bait from worm to the eye of a trout, and I say to my brother of the angle, Go thou and do likewise, and may you have the best of sport this season.

HOW TO DRESS

The proper garb for early trout fishing is heavy all-wool underwear and socks, with "dead grass" canvas or duck coat and trousers. The hat should be an old drab or gray felt, to which the flies may be easily affixed if necessary. Corduroy for outer garments is undesirable, because it is almost certain to get more or less wet, and it dries very slowly. The best things for the feet are the regular tan-colored waders. Such a costume is inconspicuous against the ordinary surroundings of trout streams, and this point is very important. Avoid all flashy trimmings on a rod, and move as slowly and cautiously as you would if trailing a deer. The observance of these hints, on much-fished waters, will help to fill the creel.

Outing for April.

CYCLING.

THE PRESENT SITUATION.

N. C. A. PROVISION FOR AMATEURS.

THE National Cycling Association earned its right to take up the conduct of racing where it was left by the L. A. W. by reason of its correct principles. No error-hiding organization could make such progress as has this one under conditions apparently entirely unfavorable to its growth. However much it may be claimed that its present hold is due to being alone on hand and equipped to gather the fruit ready to fall somewhere, candor compels the admission that judiciousness has been the rule of its board. Reasonableness has likewise characterized its rulings, and the result has been a high order of satisfaction throughout the sphere of its influence.

That the professional sport is also under N. C. A. control argues nothing against the wisdom of confiding amateur competition to its care and keeping. Duality in authority, lax divisions between classes, and the numerous inconsistencies of legislators and executive officers have in the past worked vastly more harm to amateurism than the careful centering of both wings of the sport in the same hands.

Among the provisions of the N. C. A. for the fostering of amateur competition in the United States is the plan of offering registration to all men in good standing in the L. A. W. to date. This is meeting with a widespread and quick response. Amateur clubs receive active membership for \$10 per annum and thereby come into partnership with all the work of the organization.

With such veteran sportsmen as John A. Blaurock and William B. Curtis as pillars in N. C. A. management—the former the president and the latter on the board of appeals—serious errors of judgment ought not to occur.

Believing that the present outcome of this long and costly contest is for the ultimate best good of amateur cycling, OUTING will henceforth recognize, and so far as lies in its power will aid both the L. A. W. and N. C. A. in all the legitimate efforts they severally undertake.

It has been suggested that the N. C. A. national amateur championships should be held in connection with the L. A. W. national meeting at Milwaukee, Wis., in the approaching August. An agreement upon the same dates would seem appropriate, and the opportunity to display the combined strength of cycling organizations in this country too favorable to let slip.

THE PASSING OF THE CYCLE CLUB.

The passing out of existence of many local wheel organizations evidences the changed conditions of the pastime. Not long ago not only were there a number of clubs in each of the larger cities, but nearly every small town boasted at least one. There was something actually contagious in the inception and development of the club spirit. In the late eighties and early nineties the conduct of the sport was largely vested in the clubs, led by the Springfield (Mass.) Bicycle Club, whose old-time tournaments marked the high tide of enthusiasm over the wheel in this country.

Decline in cycle club life began in 1897, and



CONWAY W. SAMs, PRESIDENT L. A. W.

it continues to-day. A special annual gathering, "The Wheel About the Hub," serves to keep the members of the Boston Bicycle Club within hailing distance of each other, aided, perhaps, by the consciousness that the oldest organization on this continent owes something in the way of example to the pastime at large. Veterans' societies and clubs are bound together by special ties, but they are of small number to-day. The drift is toward consolidation or change of character of cycle clubs so as to include other social and athletic features.

Long ago the Boston Bicycle Club abandoned its club-house and purposed to keep its mem-

Cycling.

bership full and its influence alive by other means. This step was founded in wisdom and foresight, considering that its rank and file are composed largely of men in or past middle life. As an exception to the general rule, the Detroit (Mich.) Wheelmen have held to old-time membership figures, and have built a club-house unexcelled in its appointments in this or any other country.

ROAD IMPROVEMENT IN THE WEST.

The spirit of highway improvement manifested in most of the territory between the Alleghenies and the Missouri River has already advanced to practical results. In Southern and Eastern Wisconsin the interest taken in this movement has crystallized into numerous county organizations for the carrying out of plans determined upon. The crusade in that State was begun by Senator James H. Scott, of Menominee, who, working with Gen. E. T. Harrison, U. S. Government road expert, built a section of road at his own expense, and at an auspicious time gathered several hundred farmers to inspect it. Last fall the State fair management took up the idea and constructed a stretch of improved road at Milwaukee. In connection with this enterprise a convention, at which over one thousand delegates were in attendance, was held.

As a result of this initiative the several counties of the Badger State have been organizing this winter, Waukesha leading with a "Good Roads and Improvement Association." The new counties seem to be taking the lead in this matter. There is much talk in Milwaukee of constructing a boulevard between that city and Racine, projecting it southward to meet the extension of the Sheridan Road out of Chicago, and thereby making the finest long public highway in the United States.

Efforts of this nature give the most substantial encouragement to the national movement for better roads, and greatly advance the interests of cycle touring. Conscious of increasing public support, local interests are about to make vigorous campaigns for the passage of radical highway improvement measures in several States.

MOTOR-CYCLE RACING.

The motor cycles are certain to find extreme favor this season, and innumerable competitions are assured. Traveling at railroad speed requires nerve, and the faint-hearted rider should refrain from competing, especially on the six-lap tracks, of which there are many. Motor racing is the most interesting spectacle ever contributed by cycle sport. The prevalence of motors will mean much to the middle-

distance game, and fields of a dozen starters may be expected.

There is one problem which will require solution in order to assure contests close, and interesting to the public, and that is the scaling of the power of the competing machines. The vehicle with the greatest amount of power, barring accident, can hardly fail to evolve as winner. This means that the machines will have to be divided into different classes according to horse-power; then, with motors supplied with the same amount of power, the pedaling of the riders becomes the factor in the race, and this is just exactly what should be the case. The Board of Control of the N. C. A. will endeavor to meet the requirements of the situation.

THE NEW ROADS CAMPAIGN.

There has been an uneasy feeling that possibly the Automobile Club of America would conduct its good-roads campaign without relation to what was being done by the L. A. W. Such, unfortunately, will be the case. While the cyclers are very strong in numbers, the automobilists contain many influential members who are in touch with political affairs. It is to be sincerely hoped that the one million dollar appropriation now being urged in Albany will be secured, and the disgraceful public highways of this State improved. A start was made last year under the provisions of the Higbie-Armstrong act, but the future demands the expenditure of many thousands of dollars upon miles and miles of badly constructed roads in the Empire State. New Jersey and Massachusetts are years ahead of New York, thanks to the agitation of wheelmen in no small degree.

NOTES.

Mr. John J. McElroy has become chief consul of the Maryland division L. A. W. in place of Mr. Conway W. Sams, the new president of the national organization.

Financial troubles incident to the holding of the 1898 world's cycling championships, at Vienna, Austria, have culminated in the suspension of the track association of that city from I. C. A. privileges until settlement of obligation then incurred is made.

The road motor continues to prove its capacity to meet the severe requirements of winter work. Very few stoppages are reported in proportion to the number of vehicles in constant service.

It is announced that the Woods, Winton and Riker vehicles will be the American competitors in the race for the Gordon-Bennett cup to be run in France the coming summer.

THE LIGHT HARNESS HORSE.

WHAT THE AMERICAN HORSE HAS ACCOMPLISHED
IN RECORD MAKING.

ALTHOUGH we are a nation of business men, active, energetic, and successful, it is no less true that a large majority of our citizens are by instinct sportsmen; yet it was not until near the opening of the nineteenth century we realized that the trotting gait of horses gave promise of considerable speed and pleasure; then we commenced to develop it, using the means at our command. By careful breeding and training we stirred the world, in 1845, with the feat of Lady Suffolk, who trotted a mile in 2:29½, at old Beacon Course, Hoboken, N. J. From that day to the present nearly every year has marked some development in speed.

When Dexter trotted a mile in 2:17¼, in 1867, it was generally expected that we had reached the limit of speed, but only four years later, in 1871, that great mare, Goldsmith Maid, trotted a mile in 2:17 at Milwaukee, Wis., and the next year, in June, at Mystic Park, Boston, Mass., reduced her record to 2:16¾. Her undisputed sway was short-lived, for the next year Occident also trotted a mile, at Sacramento, Cal., in 2:16¾, but his division of the honors with the famous Goldsmith Maid was of short duration, for, in July, 1874, at Saginaw, Mich., the Maid trotted a mile in 2:16. At Buffalo, in August, 1874, she again reduced her record, placing it at 2:15½; at Rochester, a week later, she still further lowered it to 2:14¾, and on September 2d, at Mystic Park, she cut her own mark to 2:14.

This remained as the world's record until August, 1878, when Rarus trotted his sensational mile in 2:13¾ at Buffalo. Then, in October, 1879, came the great St. Julien, who, at Oakland, Cal., trotted to a record of 2:12¾.

In 1880, August 12th, at Rochester, N. Y., a new star appeared. Maud S. trotted a mile in 2:11¾. On the same day, and at the same place, St. Julien also trotted a mile in 2:11¾, and thus again were honors divided. On August 27th, St. Julien trotted to a record of 2:11¼ at old Charter Oak, Hartford, Conn. In September, Maud S. again became champion, when she took a record of 2:10¾ at Chicago. The next year, 1881, Maud S. reduced the record to 2:10¼ in August, at Rochester, N. Y.

Then came that dashing little horse, Jay-Eye-See, to astonish the world with the first mile in 2:10, at Providence, R. I., August 1, 1884. On the next day, August 2d, at Cleveland, Ohio, Maud S. won back her lost laurels by trotting

a mile in 2:09¾, a record which she reduced in November to 2:09¼. In 1885, on July 30th, at Cleveland, Ohio, Maud S. reduced her record to 2:08¾, which remains to this day the world's trotting record to high-wheel sulky.

Not until 1891 was such speed equaled, when that California whirlwind, Sunol, in October, at Stockton, Cal., trotted a mile to bicycle sulky in 2:08¼. The next year saw the famous Nancy Hanks in meteoric succession reduce the record to 2:07¼, 2:05¼, 2:04, the last performance being at Terre Haute, Ind., September 28.

Two years later the famous little mare Alix, from Iowa, trotted a mile at Galesburg, Ill., in September, in 2:03¾, the present world's record. All these records, except the 2:16 of Goldsmith Maid, were against time. The *race* record for the world is 2:05¼, held jointly by Alix and Directum. The average winning time of races continues to grow faster, as a glance at statistics proves, although there has been no reduction of the great championship records for seven years.

GROWTH OF INTEREST IN THE LIGHT HARNESS HORSE.

The past three years have witnessed unprecedented growth of interest in the light harness horse. Almost every town from Portland, Me., to San Francisco, Cal., has in that period formed *matinée* driving clubs. With most of these organizations the first object has been to secure a membership of the highest character, insuring permanency and good-fellowship, as well as the fullest possible measure of enjoyment.

During the season, which usually opens in May, *matinées* are held as often as once a week by each club and a regular programme arranged by the racing committee. Among the more successful of these clubs cups and other souvenirs are presented at the end of the season for the fastest mile trotting, fastest mile pacing, greatest number of heats or races won, etc.

In most cases the racing committee arranges all contests with a view to making them as nearly equal as possible without reference to records, and almost invariably the rules provide that all races shall be to wagon. This has made the sport safe for the driver, and had the further effect of developing many great reinsmen who would never have chanced fast drives in the two-wheelers.

The general tendency toward racing to wagon has brought out the up-to-date racing rig, a mere racing shell, weighing in many cases less than seventy pounds, and with it many sulky records have been materially reduced. There

The Light Harness Horse.

are many people who believe the time will come when the professional light harness races will be to wagon and the sulky have a place only in history.

Coincident with the establishment of *matinée* clubs has come also the establishment of speedways in almost every city. The great drive-way in New York was the pioneer, and now many other towns have public boulevards devoted to driving. It has been estimated that almost, if not quite, one thousand trotters and pacers, costing an average of nearly one thousand dollars each, have been used for pleasure driving in New York City alone during the past year. Among them the noted trotters: Kentucky Union, 2:07 $\frac{1}{4}$; Derby Princess, 2:08 $\frac{1}{2}$; Lesa Wilkes, 2:09; David B., 2:09 $\frac{1}{4}$; Dan Cupid, 2:09 $\frac{1}{4}$; Alves, 2:09 $\frac{1}{4}$; Louise Mac, 2:09 $\frac{1}{4}$; Lucille, 2:09 $\frac{1}{4}$; Pilot Boy, 2:09 $\frac{1}{4}$; James L., 2:09 $\frac{1}{2}$; Page, 2:09 $\frac{1}{2}$; Praytell, 2:09 $\frac{1}{2}$; Harrietta, 2:09 $\frac{3}{4}$; Ottinger, 2:09 $\frac{3}{4}$; Maud C., 2:10 $\frac{1}{4}$; Georgeanna, 2:11 $\frac{1}{4}$; Iron Bar, 2:11 $\frac{1}{4}$; Octavia, 2:11 $\frac{1}{2}$; Luxon, 2:11 $\frac{1}{2}$; Newcastle, 2:11 $\frac{3}{4}$; Cobwebs, 2:12; Woodford C., 2:12 $\frac{1}{4}$; Belle G., 2:12 $\frac{3}{4}$; Cuprum, 2:12 $\frac{3}{4}$; Commodore Porter, 2:13; Nibbs, 2:13 $\frac{1}{2}$; West Wilkes, 2:13 $\frac{1}{2}$; J. B. D., 2:13 $\frac{3}{4}$; Glenmere Boy, 2:14 $\frac{1}{4}$; Sirock, 2:14 $\frac{1}{4}$. Among the pacers were: John R. Gentry, 2:00 $\frac{1}{2}$; Robert J., 2:01 $\frac{1}{2}$; Bumps, 2:03 $\frac{1}{4}$; Bessie Bonehill, 2:05 $\frac{3}{4}$; Dariel, 2:07 $\frac{1}{4}$; Paul, 2:07 $\frac{1}{4}$; Steel Prince, 2:07 $\frac{1}{4}$; Quadriga, 2:08 $\frac{3}{4}$; King Egbert, 2:09 $\frac{1}{4}$; Ada P., 2:09 $\frac{1}{2}$. These are only the extremely fast ones. There are hundreds of others with slower records, and still other hundreds with no records. The fastest ones, as shown by actual speedway contests, are Cobwebs, 2:12, trotter; Dariel, 2:07 $\frac{1}{4}$, pacer, and in the teams, Honor Bright and Rival, trotters, and Sir Eld and Island Belle, pacers.

A STARTER FOR SPEEDWAY RACING.

There is some opposition to Dr. H. H. Kane's proposal to employ a starter and appoint a committee to arrange *matinée* races for the New York Speedway. The opponents claim that this will tend toward professionalism and limit the pleasures of those who do not happen to be members of the Manhattan Road Drivers' Club. I do not think such results would follow, and fairness demands that all tests of speed be made on an equality. As to a committee to arrange matches, it could very much increase the interest of thousands, and it is the only way in which noted animals can be brought together with certainty. The contests of any day need not occupy a great deal of time, and the moment they are finished the great speed course would be open to all drivers. Everyone

interested in the elevation of the light harness horse will agree with Dr. Kane's suggestion.

NOTES.

The Atlantic Transport Line offers a handsome silver cup for the best American-bred harness horse to be shown at the Royal Horse Show, Richmond, England.

Mr. C. H. Halcomb, of Syracuse, N. Y., has purchased the team of hackneyized trotters, Red Ink, 2:22 $\frac{1}{4}$, and Red Bud. The price is reported as \$5,000.

At the annual horse show at Durland's Academy, New York, March 28-31, there will be twenty-eight classes, all but two of which are for amateurs. One-half of the classes are for horses of the park type. Messrs. H. K. Bloodgood and George B. Hulme will be the judges in the harness division.

At a recent meeting of the Gentlemen's Driving Club, of Hartford, Conn., the following officers were selected: President, R. N. Fitzgerald; Vice-President, Dr. M. J. Black; Treasurer, H. H. Peck; Secretary, C. W. B. Edwards.

The annual spring trotting meeting of the Queen's County Agricultural Society will occur at Mineola, L. I., June 20th and 21st. Entries close June 9th, and should be addressed to Thomas H. Bacon, Jericho, L. I.

Steel Prince, pacer, 2:07 $\frac{1}{2}$, by Steel Nail, is dead.

The great mare Fantasy, 2:06 $\frac{1}{2}$, who holds the three-year-old record for mares, at 2:08 $\frac{3}{4}$, will be raced again this year if she stands training. She is now ten years old.

Mr. E. H. Harriman, of New York, has bought the four-year-old stallion Vermont Chimes, by Chimes, out of Sister, 2:25 $\frac{3}{4}$, by Ethan Allen. Reported price, \$4,000.

A *matinée* driving club with sixty-five members was recently organized at Bellevue, Ohio. The club has an excellent half-mile track.

A driving club has been organized at Morristown, N. J.

Beaver Falls, Pa., has a newly organized driving club, which will hold regular *matinée* events this season.

Spots is the latest of the converts among nags to the American trotter. The chestnut stallion J. F. Hanson, 2:19 $\frac{1}{4}$, by Hambletonian Wilkes, was recently purchased by a resident of Seville.

The Philadelphia Park Commissioners have decided to remodel the track and club-house of the Gentlemen's Driving Park.

Mr. C. C. Lloyd, of New York, has bought Malzour, 2:15 $\frac{3}{4}$, to drive with Richard B., 2:21 $\frac{1}{4}$. The price was \$2,250.

NATHAN A. COLE.

Outing for April.

NOTABLE PERFORMANCES AND RECORDS.

CONDUCTED BY WILLIAM B. CURTIS.

DURING the winter months many indoor athletic meetings are held in Boston and adjacent cities, and the halls selected for these sports usually allow a straightaway course only forty yards in length. This fact has led to many 40-yard races—novice, handicap, and special—as many as seventy or eighty men being a common number of starters, thus making necessary a great number of heats. The men run on a smooth board floor, and wear short, blunt spikes.

Since 1892 the forty yards, from pistol start, has been run in 4 3-5s. by E. B. Bloss, F. H. Bigelow, H. C. Kennington, B. J. Wefers, L. W. Redpath, F. Scheuber, and A. F. Duffey. The last-named, formerly of Worcester High School and now of Georgetown University, won the national 100-yard championship last fall, beating, among others, B. J. Wefers and A. C. Kraenzlein. He has covered forty yards in 4 3-5s. six times, the latest being Feb. 3, 1900, and three of the six were made on the same evening, Feb. 18, 1899. He is a lad not yet of age, short and strong, resembling Westing, Ford, and Wilmer more than other of his predecessors as sprinting champion.

Amateur swimming has been unusually active this season owing to the inclusion of aquatic sports in the programmes of the Boston and New York Sportsmen's Shows, beginning February 22d, in Boston, the latter still in progress as this page goes to press.

The hero of the Boston meeting was Mr. E. C. Schaefer, an undergraduate student of the University of Pennsylvania, and a member of the New York Athletic Club.

When he began competitive swimming, two years ago, he was a slim lad of eighteen years, 5ft. 6in. in height, weighing about 110lbs., and noticeably small and weak below the waist. Intelligent training has done much for him, and now, at twenty years, he has gained half an inch in height, weighs 135lbs., and has filled out finely.

He is probably the fastest amateur ever known in America, and not only wins championship after championship, but wins them so easily that as yet his measure has hardly been taken. He is not at his best below 75 yards, but from 100 yards to a quarter of a mile has no peer in America.

During the second week of the Sportsmen's Show at Boston he won six national championships—at 60 yards, 80 yards, 100 yards, 120 yards, 160 yards, and 200 yards—scoring

one championship each night for the whole week.

His time for 60 yards with two turns was 37s., just equaling the American record, made four days before, in the same pool, by S. P. Avery, of the Boston Athletic Association.

At 80 yards, with three turns, he won in 51 4-5s., which now becomes the fastest American record, supplanting 1m. 3s. by C. H. Thorne, at Chicago, Ill., March 14, 1896.

His time for 100 yards, with four turns, was 1m. 6 2-5s., just 2-5s. slower than the American record, by H. A. Weidemann, at San Francisco, Cal., July 6, 1898.

Next he won the 120 yards, with five turns, in 1m. 23s., and the 160 yards, with seven turns, in 2m. 3 3-5s., both of which are now the best American records, by default, no previous good performances at these distances having been noted.

His long sequence of victories was rounded up by the 200 yards, with nine turns, in 2m. 30 2-5s., which is now the fastest American record, supplanting 2m. 38 3-5s. by H. H. Reeder, Jr., in Madison Square Garden, New York City, March 15, 1899.

Although so many of Mr. Schaefer's performances are the best on record in America, they have all been beaten in England and Australasia, whose amateur swimmers seem to be in front of us at all distances.

The most meritorious achievements of the winter season have been on ice.

The following are the important decisions of the mid-season :

Curling, February 27, at Hoboken, N. J.—"The Dewar Cup," by the Manhattans, of New York, D. G. Morrison, skip, defeating Thistles, of New York, R. Lander, skip, by 16 points to 15.

Racquets.—March 7, at the Montreal Racquet Court, the Canadian Championship won by Eustace H. Miles over F. F. Rollins, champion '99. Scores: 15-3, 15-2, 15-6.

Lawn Tennis (indoor) Championship of America, at the Seventh Regiment Armory, New York, February 24 and March 3.—Singles, John A. Allen beat Calhoun Cragin, 6-1, 2-6, 6-4, 6-3.

Doubles, J. Parmlly Paret and Calhoun Cragin beat Harold H. Hackett and John A. Allen, 5-7, 7-5, 7-5, 10-8.

Ice Yachting, February 6-7, on Lake Pepin.—The North west Pennant won by *Scipner*.

February 19-21, at Kingston, Ontario.—The Walker International Cup (12 miles in three rounds) won by *Snow Cloud* in 29 minutes.

Ice Hockey, March 6th—Intercollegiate Association Championship won by Yale over Columbia, 6-4.

Harvard is not a member of this association, but Yale beat Harvard in February, 6-5.

Ice Pacing, Feb. 3, at Como Park, Minneapolis, Minn.—Queen Lil paced a half mile, in a race, in 1:03½, the fastest half on snow or ice so far recorded this year.

Figure Skating Championship of America.—St. Nicholas rink, New York, March 15, won by Arthur G. Keane, N. Y. A. C. Totals: Keane, 108; Duffey, 86; Lowenherz, 64.



Frederic Remington

"TODD WAS TO SIT ON HIS HORSE IN FRONT OF THE TEPEE, AND HOLD MINE WHILE I WENT IN."

OUTING

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No. 2.

A SHOTGUN EPISODE.

By Frederic Remington.

OLD Captain Jack, as he is known throughout the army, and I had been working quail all the morning when we struck a stream and sat down to a small lunch, which we managed with more ease than was agreeable to us.

We began loading our pipes, and I noticed the Captain was overcome by a series of half-suppressed gurgles of amusement. He was regarding his shotgun, which leaned against a bush in front of him.

"Why this levity?" I asked. "Do you recall some hallowed memory, when you had eight dozen hard-boiled eggs instead of only two separate ones?"

When the Captain relaxed he got rid of an elegant diction, which was his at will, and to his listener became charming in something like an inverse ratio. I felt that he could be made to do a gay picture with his golden pink method, and I always cared more for the Captain's wonderful past than the inconsequential quail.

"Do you know," he replied, "I never see a shotgun but I think of my old friend Chief Winnemucca; and if he is alive I guess old Chief Winnemucca never sees one but it makes him think of his old friend Captain Jack S——."

"How now?"

"It was a little glove-call I made on old Chief Winnemucca. He was a good sort of an Injun and a heap big chief of all the Piutes up there in Nevada. He was a great friend of General Crook, and Crook admired Winnemucca, too, because he had earned his respect by lift-

ing all Crook's horses on an occasion when the general wasn't looking. That seldom happened to Crook.

"See! this was in '77 that this shotgun business happened up at old Fort McDermitt, which was a lonely old one-company 'dobe, in the middle of a million miles of sage-brush. Right back of this post there was a high bench-land. The Indians used to sit up there and shoot into the camp in a spirit of cheerfulness, when there wasn't anything else going. I think the Eighth Infantrymen used rather to encourage the thing—for McDermitt would make a New England cemetery look like a French ball—so little episodes of this sort helped us out.

"No one else had much to do, but I was a scrub lieutenant then, and the Captain covered me with all the honors of adjutant, commissary, quartermaster, post treasurer, chaplain, and Indian agent, and I was made to scout once a month just to keep my hand in. In the post were only thirty enlisted men, and the company officers, besides a civilian doctor named Todd. This Todd was 'the original Mr. Glue from Gum Arabia' when it came to staying with a friend.

"As Indian agent I had charge of 298 solid mahogany Piutes, whom we had rounded in during the Bannock campaign. They were a touchy lot and hard to curry around the heels. I put them in a camp about a mile from the post, and old Chief Winnemucca was held personally responsible for them, but I didn't have any childlike confidence in 'Win.' He was too much of

a flirt himself for a good chaperon. When you get an old Injun warmed up with corn-juice he can turn moral hand-springs until you can't see anything but the buzz. However, Winnemucca had not gone 'out' and was all right in the main. He 'heap savied' the white man and was many weary journeys from a fool.

"Twice each week it was my duty to run a count on these Injuns in order to get my commissary right, and to see the 'Johnny on the Spot' theory was working. But I kept missing. They worked into all kinds of numerals—sometimes going as high as 350. As rations were based on the count, and as Uncle Sam don't pay his commissary officers for Injun lawn parties, it was up to me good and hard. I was getting horribly mixed up with my books until I found that by marking down certain birds, which I could remember by their tail feathers, I discovered that they ran from one tepee to another during my tallies.

I suggested to the commanding officer, who was afterward the Colonel Corliss shot while leading the assault on El Caney, that we divide them into bands—drive a series of stakes in the parade ground—line 'em up between the stakes at attention until they could show cause why they should eat Uncle Sam's grub. This seemed to be reasonable to the K. O., but old Winnemucca and his braves made a swing-mule buck, and stopped the whole team. Still we were bound to have our way because of the books. Commissary accounts have got to be as simple as a Greek column in Washington. Postscripts about thirty men and three hundred Indians are barred.

"The order went forth, and we sat up and scratched our heads over the possibilities. No Injun came in, and we began to worry some about the lay of things. It began to look like our move. We knew that wild waves of thought came over the spirit of an Injun camp, and no man can see into the future as far as his horse's ears when the tom-toms begin to thump.

"Presently an Injun came into camp—one of the small chiefs of the Piutes, Natchez by name. His head was badly cut, he was wounded in the body, and was red all over. He said he had always been a friend of the white man; that

Winnemucca's camp was full of Shoshones. His people were all drunk, and getting ready to dance—that after the dance they were coming up to wipe McDermitt off the map, and that he had only escaped with his life to tell us.

"What to do with our small force was not at all clear. Three hundred or more to thirty men, and the nearest possible relief ninety miles, was the proposition, and things due to happen on the jump. We could not take the initiative. Besides the women and children there was a lot of government property in the post.

"The Captain ordered me to go into the camp and arrest Winnemucca. He offered to spare me ten men, but I said I would go alone. I knew ten men wouldn't stand the styles down at Winnemucca's. Here is when Doctor Todd began to roll his tail—he said he would go with me. Todd would have made as good a phlebotomist with a saber as with a lancet. He was the old holiday goods.

"I went to my quarters and got a shotgun with a belt full of buck cartridges. My wife thought I was going hunting. Todd had a six-shooter, and we saddled up and started. Now this old pitcher had been to the well a good many times, but I was afraid she was going to get cracked this trip.

Winnemucca's drunken, dancing camp was a *recherche* bunch for two men to mob. I made no doubt of that. The more I thought my scheme over, however, the madder I got. I concluded to ride through the camp as hard as I could and get to Winnemucca personally. I then intended to make him protect me, or to kill him. Todd was to sit on his horse in front of the tepee and hold mine while I went in. When he heard firing he was to make a break to try and get through to the post and to leave me.

"We went through the camp, whirlwind fashion. There wasn't a buck, a squaw, or a papoose in sight, and from what I knew of Injun domesticity, I didn't get much encouragement out of this.

"We got to the tepee—Todd held my horse, and I dove into the plant and squatted quickly down by the door. The light was bad, and I was keyed up. On the left of the tepee was old Winnemucca

and Charlie Thatcher, the interpreter, lying down. Across from them were two Shoshone bucks squatting down with their blankets drawn tightly around them to their chins.

"They were all very much surprised, and somewhat drunk. I quickly shoved the double-barrel under Thatcher's ear, and told him to put his six-shooter at my feet, or I would blow his d—— head off. He did as I directed. Then I elevated the gun until it covered old Winnemucca, and he did likewise. All this time I was keeping my eyes on the two

came around to my way of thinking. I told Thatcher that he would lose his hundred dollars a month from the government—that we would make an old woman out of Winnemucca, and I made the two Shoshones sit up like maids in school. But all the time I was running this bluff I was somewhat perturbed—would you call it—no—I was scared stiff-legged.

"Winnemucca and Thatcher promised to report at the post next day, and to run all the Shoshones out of camp during the night.



"Then I jumped to my feet and told the visitors to throw off their blankets."

Shoshones, and had figured to let one barrel into Winnemucca, then to let the other go at the Shoshones, while I hoped to get my hands on the six-shooters during the smoke and confusion. They were too surprised to do anything; then I jumped to my feet and told the visitors to get up and throw off their blankets. They were stark naked, and in full war paint, but unarmed.

"I made a speech which I can't remember, but I cussed them out, and held a debate with myself as to whether I ought to kill them, but anyhow they

"Telling Thatcher to take the two guns out to Todd, I backed out, jumped on my horse, and we trotted out of camp. All this time there was not an Indian in sight. I don't know where they were, and I could never find out.

"They came up the next day all right, and the incident was closed. I got to be a good friend of Winnemucca's, who always hit me on the back, and said I was a 'big chief,' but if he had known how scared I was, I don't think he would have thought so.

"For shotgun work give me quail."

THE HYBRID WOLVES OF "GOSHEN HOLE."

By Nilmah Ednoc.

I HAD escaped from business long enough for a shooting excursion, and my comrades were Kennedy, a ranchman from Montana, and two others who, like myself, were fated to breathe city air for the greater part of the year. We had enjoyed good luck and good sport, and the evenings passed merrily in recounting experiences of other days, as is the custom with sportsmen indoors. One night during a lull in the conversation, Kennedy, who was an ardent sportsman, having bagged almost every kind of game the continent affords, including even Polar bears, and who is able to relate his adventures with zest-giving ingenuousness, filled his cob pipe afresh and remarked, "Boys, I can tell you a little story which is alike interesting to the naturalist and the hunter, and I believe I'll do it in retaliation for the yarns you have inflicted upon me. My story also has the merit of being true in every detail.

"In the spring of 1883," said Kennedy, "a large brindle female bulldog ran away from Jack Hunton's ranch in Wyoming. She was very large and fierce, and weighed probably fifty or sixty pounds. Hunton's ranch was near what is known as Goshen Hole, a peculiar formation on the Platte River. Goshen Hole is only a hole when compared with an immense district, but in reality it is a strip of country beginning about seventy miles north of Cheyenne and extending northward to within a few miles of abandoned Fort Laramie. The strip varies from fifteen to twenty miles in width and is hemmed in on all sides by very steep hills, four or five hundred feet high. These hills are so precipitous as to afford only three known trails out of the Hole, and formerly this piece of land was an ideal hunting-ground, and, prior to 1883, a favorite grazing place for antelope.

"Some time after the disappearance of Hunton's bulldog, a party of hunters, who were seeking game in the Hole, came across animals which they supposed to be timber wolves, although they possessed noticeably strange traits. Instead of travelling alone or in pairs, as do wolves, these animals went in predatory bands numbering ten or twelve.

Neither did they evince the fear of man common to wolves, but on the contrary they seemed inclined to give battle upon little or no provocation. So much did they differ in their habits from wolves, that a hunter who killed one in self-defense, hacked off its head with his hunting-knife and carried it to camp for more careful examination. His friends had never seen anything like it, and they were unsuccessful in securing another specimen.

"When the hunting party returned home, its members spread the report of their queer game, and the sportsmen of succeeding years looked eagerly for this new quarry. I had the good luck to be with one of the parties which penetrated into these preserves. One day while hunting alone some distance from the camp, I ascended an eminence which allowed a wide view of the surrounding plains, and with my glass searching for a trace of game, discovered a black-tail deer being chased, apparently, by a pack of hounds. To say that I was astonished but feebly expresses my feelings, for I knew of no hunting-party in the neighborhood. I naturally watched the chase intently. The course of the hunted animal was directly toward the place where I was standing, but, when it was about two miles off, the deer followed a circle of which the hill was the centre. The creature had evidently been running for some time, and was well-nigh exhausted. After making the circuit of the hill, it turned in my direction, but was pulled down by its tireless pursuers when only a quarter of a mile distant. From my elevation and nearness, I had an excellent opportunity of inspecting what had appeared, at a distance, to be hounds. My glass showed them to be a band of about fifteen animals, half bulldog and half timber wolf.

"That the cross between a bulldog and a large wolf might produce a breed of animals to be feared will be readily appreciated. Impelled by curiosity, I approached close enough to attract the attention of the feeding brutes. They raised their heads and snarled, but made no move to abandon their prey. It did not take much reflection, although I was armed with a double-barrel express rifle,

to decide that I was hunting antelope, not wolves, and I modestly retreated. An old hunter will appreciate that this was a case where discretion was the better part of valor.

"The animals, as well as I could make out, all had the square bulldog head, but were of varying build. Some of them resembled their wolfish forefathers in the shape of the body, while others had, in varying degrees, the bowlegs of their bulldog ancestress. Such of them as did not have the usual wolf color were brindled.

"Of course, I related my experience to my companions when I returned to camp, and the next day members of our party tried to find some of the half-wolves, but without success, although we afterwards learned that three or four such bands roamed about in Goshen Hole, much to the destruction of game.

"A week later I was riding in a part of the Hole some distance from the camp. One of our horses had strayed away, and I was in search of it. While riding over a low ridge of baked earth and rocks, which was near one of the small tributaries of the Platte River, I suddenly found myself in the center of a pack of about twenty of the brutes lying on the rocks, sunning themselves. With an angry snarl, a big one sprang from a rock not ten feet distant, and my horse gave a sudden jump that nearly unseated me, and then stood trembling in every limb, as growls and snarls came from all sides.

"Instinctively my first idea was to exterminate the band, but a survey of the situation mastered any such inclination. While the animals made no attempt to attack me, they did not betray the slightest alarm at my presence, but remained where they were, contenting themselves with showing their glistening fangs as a sign of their displeasure. In moving away from one my horse accidentally came into close proximity with another, which sprang to his feet with hair bristling, and then crouched for a launch.

"My horse now bolted like a flash up the hill, running several hundred yards before I could regain control, and then it was impossible to force him to return, although I was so angry as to be eager to do battle. To be sure I did not care to commence the fight when the entire pack was around me, but

with a selected battle-ground, I felt certain of victory, although I chanced to be only half-armed. I had left my rifle in camp to save carrying weight, but I had a 45-calibre six-shooter, an extra number of cartridges, and an eight-inch hunting-knife."

"Then you did not get a specimen to support your story?" interrupted a listener.

"Yes and no," continued Kennedy. "Before I left the Hole I got some revenge for the two insults. A few days before starting for home and after three sportsman-like attempts to obtain a specimen of this new species, I resorted to more certain, but not such admirable measures. Tying a bunch of deer entrails to a lariat I dragged it along the trail for several miles in the vicinity of my last adventure. Every few hundred yards I threw out a piece of venison in which I had cut a slit and inserted a pinch of strychnine. A close search the following morning resulted in the finding of one dead dog-wolf and traces which showed that another had received an overdose and escaped.

"No better specimen for my purpose could have been secured. It was a full-grown male, apparently three or four years old, and had some of the marks of each of the breeds from which it sprang. The head closely resembled a bulldog, but the muzzle was a little longer, and the fangs were exceptionally long and strong. In the shape of the body the wolfish characteristics prevailed, although the shoulders were thick and strong. In color there seemed a blending of the gray timber wolf and the brindle bulldog. I estimated the weight of the animal at seventy-five pounds, and it was as formidable a beast as a sportsman could desire to encounter.

"Our party stayed in the mountains until so late in the season that the snow caught us, and in the desperate struggle for life on snowshoes the entire party had in getting out, it became necessary to abandon the wolf skin, along with the other baggage. I am going after a specimen next September, and will stay in Goshen Hole until I get it."

As we made preparations for turning in, Kennedy remarked that the only other case of the inter-breeding of dogs and wolves had been reported from the Saskatchewan region, the canine ancestor in that case being an Eskimo dog.

THE FILIPINO IN SPORT.

By Edwin Wildman.



THE Filipino is a hunter by instinct and a sportsman by choice.

Before the Spaniards introduced Inquisitorial methods in the islands an offending individual or tribe afforded the chief quarry of the natives. A "head hunt" was attended with great ferocity, resulting usually in the practical extermination of one of the two factions engaged.

The Spanish taught the native some new tricks in human cruelty, and in the course of three hundred years succeeded in making head-hunting unpopular. At present, therefore, the islander is constrained to the less reactive sporting proclivities afforded by forest and stream.

The Filipino is not a hunter for purposes of profit. A few tons of hides, horns, and hoofs find their way into the Manila market in the course of a year, for export to China, but the proportion that comes from wild animals is comparatively insignificant. The Indian's wants are too few to make him ambitious; and, besides, from time immemorial, the Friars had a way of skimming the profits of any business transactions the natives might indulge in, which tended to encourage their hand-to-mouth existence.

Although the Filipino is something of a vegetarian, the abundance of tropical fruits and the blood-heating properties of meat recommending such a diet, he keeps his family supplied with deer, pheasant, snipe, and duck on feast days. But when he goes out for serious sport, he hunts the boar, wildcat, or carabao, as the wild water-buffalo is called.

It is not child's play to drop a carabao with an ancient carbine of the flint-lock type; neither is it easy to lay him low with a bamboo arrow, a spear, and a bolo. The carabao dies hard, and has a way of returning the compliment

when attacked, putting up a fight that would do credit to the African species. In fact, he is liable to see you first, in which case he opens the ball without further ceremony. He hasn't any speed, and he knows it, so he employs the talents nature provided him with, and holds his ground.

If he does not discover you first, all you have to do is to let him know that you are in the neighborhood, and he will do the rest. Rushing through the bamboo, trampling under foot the nepa grass, he comes at you like a Philippine typhoon, snorting and shaking his great head in fury. When within a few feet—if you are still there—he lowers his colossal horns for the toss. Then is your chance—your last chance, I might say—for, if you don't stop him by a well-placed ball between the eyes, or in that vicinity, your danger is extreme.

Carabao hunting is too much like bull fighting to please the fancy of the English sportsman, so he is not very keen on the subject. The native is fond of the sport; it is hazardous enough to engage his interest. The carabao is found in the Camarines, in the center and north of Luzon, and within a half-day's tramp of Manila in the hills of Nueva Ecija and Boso-boso, or on the plains of Pampanga. The wild-boar chase, or the hunt for the wildcat,



The Wild Carabao or Water-Bufferalo.

affords more congenial sport to the Anglo-Saxon or the Spanish sportsman.

I know a grizzly old Britisher, the captain of one of H. B. M.'s warships in Asiatic waters, who goes shooting with a 22-pound short-barreled gun. His cabin is decorated with lion heads from Africa and tiger skins from Bengal. He told me that there wasn't game enough in the Philippines to stock a Sportsman's Show. Said he had tramped from Aparri to Lord-knows-where, and hadn't had a chance to use his gun. But a man who is used to ostriches and elephants has no business in the Philippines. I know a Spanish sportsman in Manila who goes to the Camarines and Mindanao every year. His testimony is that the islands afford plenty of good runs and shooting enough to satisfy a normal hunter.

There are three varieties of the deer; two of them distinctly peculiar to the islands: small and fleet-footed, something like the little fellow found on the plains in India. The smallest is the cherrotain or mouse deer, not much larger than a house cat.

Personally, I would not advise anyone to go to the Philippines for the exclusive purpose of hunting. There is no accounting for tastes, however, and a yearly average of 80° Fahrenheit may not intimidate the veteran sportsman. The saving grace of the Philippine climate is the night breeze, and as bats are plentiful and of generous proportions, bat-hunting is quite a favorite sport. The Philippine bat, if he could walk on his tail, would be almost as tall as the native. Five feet from tip to tip is the record, and, if the moon is accommodating, good fun can be had chasing the big black fellow, who lunges from tree to tree like a monkey.

Snipe, quail, and wild duck inhabit the marshes and rice fields, but are so plentiful that it is rather tame business shooting them.

In this connection a little incident that happened in Brigadier-General Wheaton's advance toward Laguna de Bay, in March of 1899, is pertinent.



Fencing Match in a Tagalog Theatre, at Taguig, Luzon.

According to the field chart, Wheaton's column was scheduled to cross a branch of the Pasig River at Pateros, but, arriving at that point, no stream was discovered. The artillery having come up, the mystery of the missing stream was revealed. One of the three-inch guns slipped from its carriage to the earth, and, much to the surprise of the artillerymen, was veritably swallowed up and disappeared from sight. A terrible noise rent the air as myriads of ducks arose, revealing the long-sought river. The Eighth Army Corps had ducks three times a day for a week, and, as Sergeant Bill Jones said to me at the time, "Blamed if there is a hole in the water yet." Poor Bill, he's dead now, or I would give his address.

But to continue: The Philippine pheasant, the duck, or the snipe, lacks the gamy qualities and the toothsome-ness of its English, Japanese, or American congener. The bird must be eaten immediately, too, which is a drawback.

If it is hung up it spoils; if it is put on ice it loses what little flavor it possesses. The wild pigeon affords good sport, and in edible qualities is an improvement upon the others mentioned.

The natives indulge in monkey hunting, which in

the Philippines is rather lively work, the little fellows being as timid and dexterous as birds. The meat of the monkey is supposed by the Filipinos to possess certain medicinal properties.

The rice bird is one of the most coveted of indigenous dishes. It haunts the vicinity of the paddy-fields in such numbers that a dozen well-scattered charges from a shot-gun will fill your bag.

Around the shores of Laguna de Bay and the Lake of Taal in Luzon, birds of all kinds are plentiful. Woodcocks, hawks, cranes, crows, herons, kingfishers and others innumerable, haunt the rivers, marshes, and still waters of the islands.

Of all the birds the parrots and paroquets have the most beautiful plumage, and are coveted for pets. They are copied universally by the natives in their painting and embroideries, and hardly a coasting ship plying in the Philippine waters is without a dozen or more parrots and paroquets clinging to the rigging.

There are but few traversable roads in the islands, but the sportsman, before the war, was not obliged to deviate far from the beaten path to uncover all the game he wished.

The native's chief food supply, aside from fruit, comes from the fish-haunted

rice paddies and innumerable small streams that cross and criss-cross the valleys everywhere, forming the natural method of irrigation so essential to rice growing.

The shell-fish found in the bays around the islands are often of enormous proportions, one species so large that the natives sometimes use its shell for babies' wash-tubs, and in several instances the shell of the "tacloba," weighing 200 lbs., is used as a baptismal font in the churches.

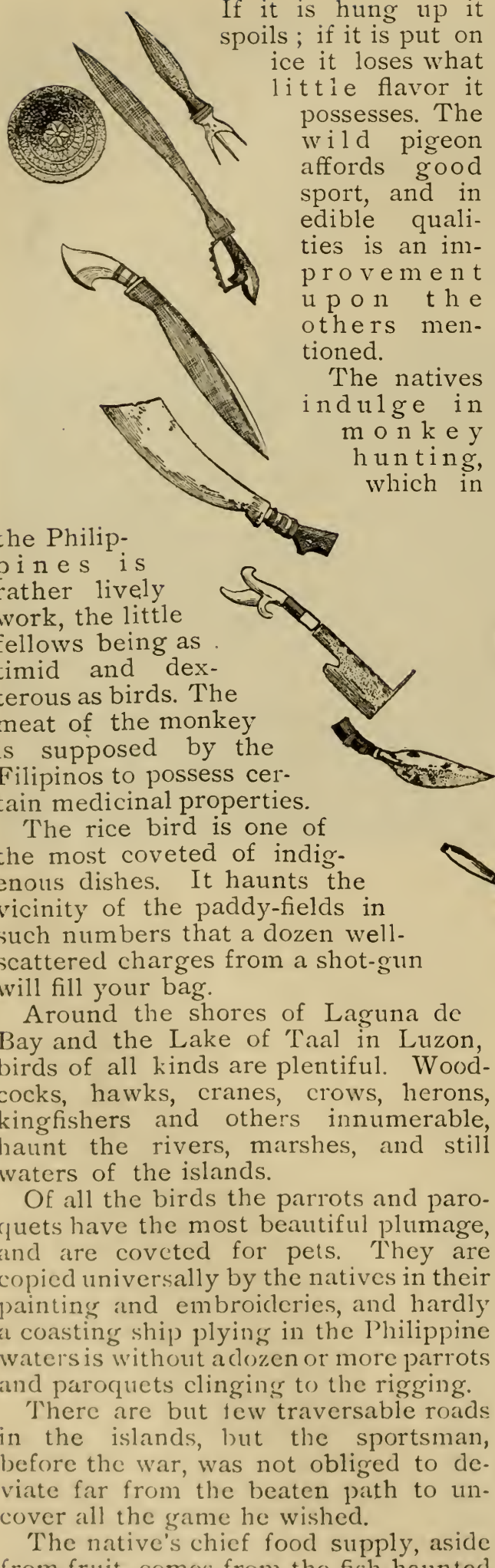
In the inland waters of the islands a small black fish is caught in abundance by the native women and boys with cane nets or clusters of hooks upon home-made hemp lines.

Fishing quite fits the Filipino's temperament, the heat of the sun having little effect upon his exposed cranium. His chief sport in the piscatorial line, however, is with the bow, arrow, and spear. In a paragua he skims along the shallow waters of the bay, and with remarkable accuracy, considering the divergence of water-shooting, brings his quarry to the surface, pierced with a bamboo spear or arrow.

Shrimp catching is universal, and this important fish food is dug from the mud-submerged banks of the innumerable estuaries of the delta lands around Manila and throughout Luzon.

Hunting the beetle does not hold out many allurements to the Anglo-Saxon, but it is a profitable business with the native, the little bug being a great delicacy and bringing a good price in the market.

The Tagálogs and Illocans are good sportsmen and are indispensable as guides and runners up. Few obstacles on land or water deter them. They will swim a stream like a fish and climb a tree with the alacrity of a



monkey. The jungle is their home and the forest their playground. When time, tide, and Providence shall have restored tranquillity in the islands, and the explosion of a gun does not portend a call to arms, the American hunter will find some good amusement in the Philippines.

The national sport is cock-fighting. From Jolo to Aparri this diversion amounts to a passion with the native. Under the Spanish domination it was licensed and permitted, and frequently indulged in by the Europeans. For a time we put our foot down upon the practice, but have not enforced the edict. We might as well try to argue the Tagalog woman out of the habit of chewing the betel-nut, or to prevail upon the Chinaman to give up opium-smoking, as to attempt to abolish cock-fighting in the Philippines. The native lavishes as great attention upon the breed and care of the fighting-cock as an American dog fancier does upon a choice litter of cocker spaniels. The family may be neglected, the wife may be left to catch the fish and chop the wood, and the children may go unclothed and unwashed, but the fighting-cock has its diet attended to and its pen scrupulously cared for. Just out of Manila the

Spanish authorities built a public cock-pit and rented it by the year to the highest bidder. Stakes were regulated by a code of rules promulgated by the State, and fifty dollars Mexican money was set as the limit for a single contest. One steel or brass spur only was permitted on each cock, and the death or retreat of one of the birds terminated the match.

Sunday is the favorite day for the game, but no holiday is complete without a fight. Virtually the whole population migrates to the scene of action, and men, women, and children watch the contest with an eagerness and enthusiasm that would discount a crowd of American children at a circus matinee. Every point of the bird's chances is discussed and weighed, and bets are made ranging from a centime to a peso and up. The women are as eager and gamble as freely as the men, and the boys set up such a clatter with their bets and dissensions that the din is deafening. The sport is not confined to the public pit. Native men and boys indulge in private contests in available backyards, or even in the public streets, and high-class Filipinos sometimes entertain guests by a cockfight in the courts of their houses.



Irrarates Huntsmen—Natives of the North of Luzon.



Mindanao Sultan and Hunting Party.

Our military authorities attempted last year to raid the cockpits and abolish the sport, but their efforts in this line of animalitarism met with about as much resistance as have our attempts at humanitarianism among the natives. We accidentally shot several cock-fighters who resisted arrest, and incarcerated numerous offenders, but the natives so persistently defied the law, and created so much disturbance, that the crusade died out, and cock-fighting continues with as much freedom as ever.

Pony racing is the chief sport of the Filipinos of the higher class. Some of the cities and larger towns throughout the archipelago have good courses, but at Santa Mesa, near Manila, occurs the most important meet of the year. Only stallions are raced, the prescribed distances being three-quarters of a mile to a mile and a quarter. The Philippine pony is not a native of the islands; it originally was brought over from China. It is a swift, stocky, and handsome little animal, and does not seem to mind the heat or rain. It is naturally fleet, and once settled to its gait, usually quite a licking one, it maintains it with tireless energy. It thrives on water sweetened with molasses and rice paddy, and is a stranger to the luxury of oats and hay. It sleeps on a stone floor, and when given a chance will

indulge in rolling and romping like a puppy.

In the *ante-bellum* days the Santa Mesa meet was the social event of the season, visitors flocking to Manila from all parts of the archipelago. Last year a feeble attempt was made to keep up the sport under the honorary stewardship of General Anderson, General Hale, Consul Williams, and eight prominent Filipinos; but the entries were small and the interest lacking. Such famous Philippine steeds as Blitz, Carut, Tajo, Ebro, Zeto, Datto, Paff, etc., were present and recorded a mile and a quarter in $3.9\frac{1}{2}$; three-quarters of a mile in $1.35\frac{1}{2}$, and two miles in 4.54; but the jockies said the races were not what they used to be. This can be easily imagined, when it is remembered that the boom of cannon and the crack of musketry not five miles away blended with the ring of the starter's bell and the cheers of the crowd.

An attempt was again made in February, of this year, to make a big meet at Manila, but conditions were against it, though the spirit is there. When more propitious days roll round we shall hear from the Filipino pony. He is now doing duty as understudy to the American trooper and the Macabebe scout.

The sport of the rich half-caste element is fencing, which General Luna

brought back from Madrid and Paris and imparted to the *jeunesse-dorée* of Manila.

Conditions in the southern islands are much more propitious than in Luzon. In Cebu, Leyte, Panay and Negros plenty of game is to be found, and our soldiery has not disturbed the wooded sections.

To think of the islands as a great jungle is a most erroneous conception. Every plain and valley of Luzon is under cultivation, though often in a rude way.

Great forests of oaks, cedars and mangoes cover the mountain sides, and in the south the giant mahogany, the rubber, the molan, and the lanan trees afford cover accessible to the hunter and abounding in game.

The sportsman need not trouble himself greatly about his commissary department. The banana, yam, monkeynut, the mango, oranges, sweet lemons, guavas, mangosteens, duriens, as well as innumerable varieties of nuts and fruits known to the natives, grow wild in the forests, plains, and jungles.

Little fear of the snakes need be entertained, despite the stories that have been circulated. There is but one poisonous reptile known, and the natives have made war upon it until the species is almost extinct.

Mosquitoes are, of course, a pest to be dreaded, but the foreigner in the Philippines, when he goes out for a hunt or pilgrimages, packs his mosquito-netting before he buckles on his revolver. In the north of Luzon, in the higher



Negrito from Marri, of Luzon, not 50 miles from Manila.

altitudes, the mosquito is less vicious.

The Philippine dog is of no account, but the native will serve as pointer and retriever. I do not think shooting will be popular, or game abundant, in Luzon for the next few years. The man behind the gun is no longer entirely safe in the interior, and the man without one would speedily forfeit, or realize his insurance policy.



Native Fishing Paragua of Marivelles, West Coast.

THE AUTOBIOGRAPHY OF A BICYCLE

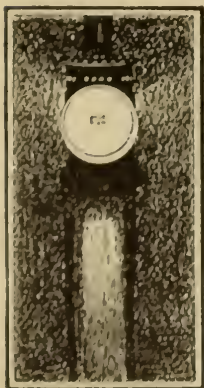
BY C. F. LESTER



RUST my spokes!" muttered the Diamond Frame. "It's hard lines, and that's as true as my front wheel!"

"What's hard lines?" asked the Lawn-mower.

"What's hard lines? Why, the way I'm left down in this dark, damp cellar, till my spokes are falling out and my chain won't move for rust; instead of going about in the open and keeping on the move, like a well-ordered wheel! After all I've done for him, too. See that crank? Broken plumb in two! And those bars—and that hump in my backbone? All for him; and now I must rust myself to death here, and in this beastly damp and darkness! Ah, well, after all, sooner or later the junk shop claims the best of us, in spite of oil and tire-tape, and I've had my day and my fling. I served my master well, for I loved him, yes, and—more power to his legs—I do still! And if he's happy now, why, I've had a hand in it—there's comfort in that! He remembers it, too, occasionally, for didn't he stop the other evening—after he'd been having fun with you, old Rattlebox (and what a racket you made over it, too: anyone would have thought you were having a fit, the way you jabbered and sputtered!)—didn't he stop and pat my crooked old bars and say, 'Good old Peg! good old Peg!' Only that, but my old spokes shivered for joy at the touch.



"Down the Inky Hollows."

"He's horribly strong!" growled the Mower reminiscently.

"He runs me up and down that yard till my cogs are hot!"

"Strong!" chuckled the Diamond Frame. "I guess! What a grip! And what an ankle-motion on the hills! And when we had a good stiff wind to buck—ah, then was when we'd get together and enjoy ourselves! 'Now, Peg!' he'd say, in that happy way, and down would go his head, and whoo-o-o! wouldn't we sizzle into it!"

"'Peg,' eh?" queried the Mower, just a shade superciliously, "what did he call you that for?"

"Oh, short for Pegasus—name of some winged horse or other, he said. Well, I was a flyer."

"But how about the crank and bars, and the rest of it?" put in the Velocipede.

"The cranks, Pedie? . . . Huh!—now there's a story for you! Oh, it's too long, I guess."

"Oh, no, let us have it!" chimed in the Wheelbarrow, whose life was not very adventurous.

"Well, if you really want to hear it; but it's long, and you musn't interrupt. Promise me that. I hate these jerky runs. I want to set a pace and keep it, I do. Will you promise?"

They would. On all sacred things they swore it. "Nick my knives!" said the Mower. "Smash my spokes!" quoth the Velocipede. "May I never hold another kid!" put in the Baby Carriage.

"Well then," resumed the Diamond Frame, "here goes for how I came by a broken crank and a hump on my back.

"It was over three years ago, and I was new and, if I do say it, no second-rater of a wheel. And he—well, he swore by me, then—at me, too, once in a while, at first; but he soon quit that, and took to giving me oil and graphite

instead—which was much more comfortable for us both.

“There were cool, bright mornings, when we went flying through the park, lazying through a shady path or bowling along a sunlit stretch, or flying down a long white ribbon of a hill. And then sometimes he’d come in the early gray and groom me from tires to bell, and give me a good feed of oil and graphite, and strap a lunch-box on my back-bone. I always knew what that meant! Forty, fifty, seventy miles; up and down, sand, mud, asphalt, gravel, strange roads and sometimes none (for we two went everywhere); very likely a tumble or two, with maybe a skinned knee for him, and a puncture for me, which were trifles to a pair of pals like us! And when we reached home, tired, dusty, squeaky, did he run me in and leave me to stand so all night, while he had a bath and a square meal? Not he—he always saw me washed and fed before he thought of himself.

“But dreadful tales have I heard while standing in the racks. Why, I’ve heard stories of ill treatment and neglect to friends of mine that made my tires swell with indignation. The drop-frames seem to suffer most; perhaps women expect more service for less attention than men; but maybe the men are to blame for it—oh, well, it’s not for a wheel to settle, anyway; at least, I never suffered:

“But most of all I used to enjoy the runs on the path at night; down the shady avenue, through the park in the pink twilight, trees all purple, and maybe a big moon poking up yellow and round over the hills. A stop for a few minutes at the fountain; and then—lamps, grips and toe-clips, and off down

the path! Steady as a clock he was those times. ‘Make it and hold it’ was our motto, and it was grind, grind, crinkle, crinkle. ‘Kling-g-g,’ ‘Right,’ ‘Steady there!’—‘On ahead!’



“The Wherefore.”

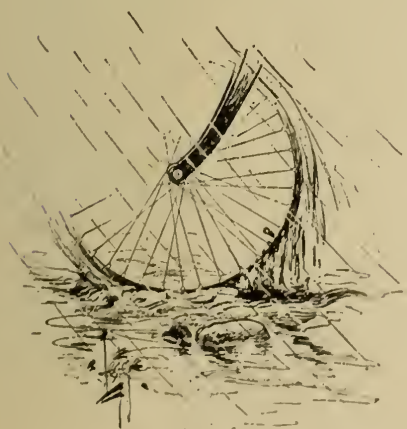
—‘Give over, *give* over!’ Skimming through the patches of moonlight, dipping down the inky hollows, scurrying up the other side with a rush—and all the time I’d be purring along at a fifteen clip, and just quivering with the sheer joy of the thing.

“Well, those days were as near Heaven as I expect to get this side of the junk yard.

“But there came a change. One day he appeared in a new wheeling suit that made me catch my breath. A latest model chainless couldn’t touch him for looks. He went at me with rags, brushes, oil, soap—Heaven knows what he didn’t use on me—and when he finished I looked as if I’d just left the works.

“Shortly we started off, and soon turning down a street I had never before seen, stopped before a house with a vine on the porch.

“‘Something’s up!’ thinks I, ‘but what?’ Just then the basement door opened, and out came—well, I can’t describe her; only I knew the wherefore of the new suit and my extra grooming; and I felt, too, even then, that there was going to be an end of



Mud.

the good old free days of rough-and-tumbling.

"Well, after that it seemed to me I never moved without that blue drop-frame being along, too. It didn't come all at once, you understand, but little by little the long runs and the lonely night revels on the path grew fewer and farther apart, and the road to the house with the vines became more and more familiar, until at last I used to turn down there of my own accord. The drop-frame was good company enough—a bit

offish at first, being a Special, but she grew so sociable after a few runs together. That, however, was not worrying me: it was that I felt the old companionship with him slipping away. He had eyes and tongue and ears for her only, now; and when he did go off alone with me, ten to one he'd wander around aimlessly, now digging at the pedals like a demon, then just wabbling along slumped together on the bars, scaring me into fits by steering into carriages, trees, or posts. Ah, I led a sad life of it! Pedie, offer up thanks that your rider is too young to fall in love!

"Well, one night, somehow or other he got past her street, and we found ourselves drifting along the Long Road, all alone (I was squeaking a bit, for he had forgotten my bearings for days).

"Pretty soon he begins muttering to himself. 'My boy,' thinks I, 'you're in a bad way. I'll bet my sprocket it's about her!'

"Sure enough, pretty soon he says, 'If I thought she did,' and with that he sat up and gave a kick that sent me cavorting; then, the next second, down he slumps over the handle-bars. 'But why should she? I might as well stop thinking of it—stop thinking of it? No, never!' and off we capered again. 'I'll *make* her—ah, but what right have I to try—what offer,' and plump he lands on the bars again; and I suppose he'd have gone on like that all night, if I, seeing something must be done to shake him up, hadn't run deliberately into a tree, which aroused him and turned us homeward.

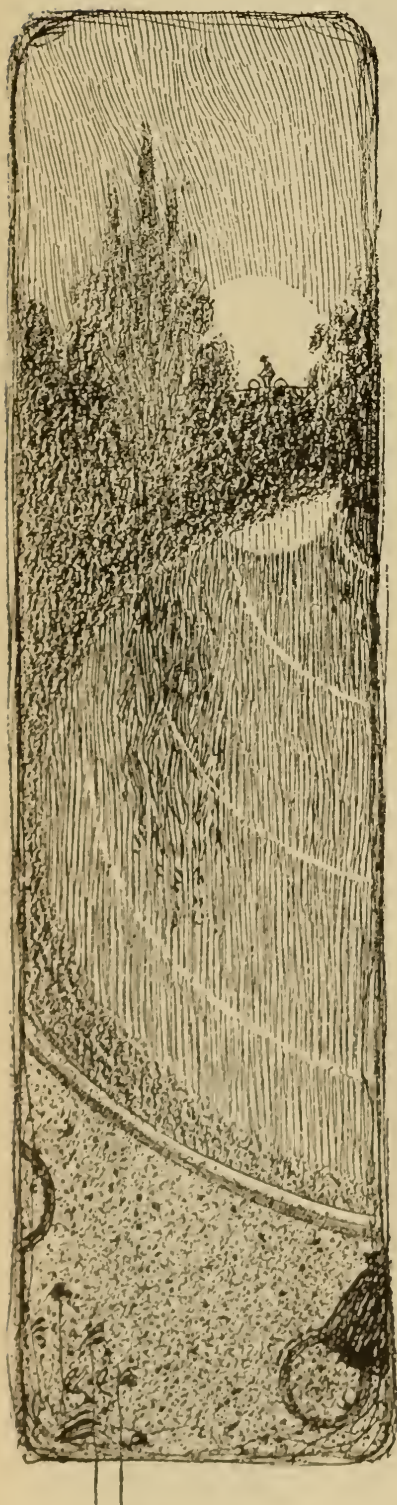
"It was two days after this, about four of a bright and breezy afternoon, that we four were out on the Woodland Drive. The Special was quite sociable, but I was too much absorbed in thoughts of our last ride on the Long Road to respond. I felt it in my frame that something was about to happen.

"He and she were in fine spirits and laughed and joked at a great rate. At the top of the hill there was a bench and he proposed a rest. 'Yes, you poor fellow,' she answered, 'you must be tired after pushing me up that long hill!'

"I didn't just hear what he said, but it was something about always pushing her up hills. He talked pretty low. She gave a queer little look and I thought I heard her say 'silly' and 'such things.'

"They sat there quite a while, too far away for me to hear, but I watched. Then I saw him move close to her, and say something very earnestly, and she drew away with a laugh—a cold, maddening, little laugh—and stood up. 'Let's go home!' she said.

"But he paid no attention to her. He made four great strides to me; I saw his eyes as he came, and prepared for the ride of my life. Without a word he took my bars, mounted, steadily as a rock, she still standing watching him, and together we swept away, around the bend of the road, out of sight of her; and then it came! Not a word he said; but he gripped my bars till I winced; I could feel his head go down and his back arch and his quivering toes flip into the clips;



"A Big Moon Poking Up."

and then he rode—sprockets and chains, *how* he rode!—blindly, furiously, not with the old even stroke, but jabbing fiercely at the pedals till I reeled and sped in great leaps—over stones, down hills, up hills, on, on—while his breath came hoarse and gasping, and great drops from his hot forehead dripped on my front tire. On, mile after mile, till at dusk he slid from my back by a little stream on a lonesome road, threw me and himself on the grass, and slept, clean ridden out.

"We got home in the early morning after a dreary bit of going, and for the first time in my life he left me without a touch, and went upstairs. I stood there a week, dirty, bruised, bedraggled, without a glimpse of him. Then he came and put me in shape.

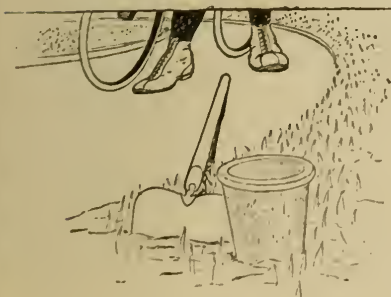
"Peggy, old chap," he said, 'I've neglected you, haven't I.' That was the last I saw or heard of him for five long months.

"I'm afraid this is more of a run than I thought when I started. Are you fellows tired?"

"Oh, no; go ahead!" said the Velocipede. "Wasn't she a chump, though!"

"I should say!" put in the Lawnmower. "I hope he got square with her." The Lawnmower's disposition was just a bit vindictive.

"Well, he did," replied the Diamond Frame. "That's the rest of the yarn, and the best, too. I'll go ahead and do another lap, if you say. Well, then, as I was saying, all that long winter I stood here alone, dusty, tires flat, generally dilapidated, and pretty glum, I tell you. But spring came at last, and one day, while wondering if I was ever going to feel asphalt again, he came in and over to my corner; and glory! he had on his riding suit;



Spring.

not the prize-beauty one; but the good old gray one, faded with August sun and bleached with November rains, bespattered and streaked with the white stains from the marsh

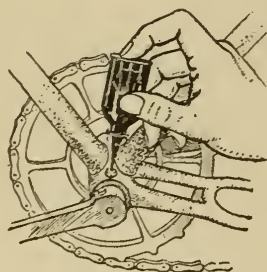


Deliberately Into a Tree.

clay and the red of the hills and the brown mud of the country lanes. Yes, there it was and he in it; and that meant that we were off again on the road.

"And so it was. He took me by the bars, and led me into the glorious spring sunshine, and, 'Now, Peg,' said he, in the old, quiet tone, and—so good times came back.

"We kept the old paths pretty warm for the next month, all except her street and the Woodland Drive. I tried all I knew to please him and help him forget, for I knew he hadn't, but was just trying to live it



A Drink of Yellow Oil.

down, like the game lad he was.

"For a month or so we led the old life. He seemed to prefer the long runs and the hardest, hilliest roads. But I was with him every time, and took all the gruelling work without a squeak; you see, we were a pair of stayers. One day we headed for the Mountain Road, good enough under tire, but a stiff grade, with nasty curves, steep hills on the upper side and high embankment on the lower; just the climb to test wind and bearings to the limit. Of course we went at it in the usual way, smooth and steady. It was a treat to climb a hill with that man! No yanking your bars out of your head every stroke; no kicking at the pedals to keep the chain flop-flopping, but just a firm, steady lift, and



And Then."

an ankle-motion that strained your chain all the time—up, up, till the last twenty yards, and then that last little rush to the top and over, just to show we had a bit left.

"And so we were taking it, and had gotten half way up the long quarter-mile stretch when my bearings began to feel dry. I kept on a bit, for I hated to make him stop; but at last I did give a little squeak that brought him to the ground in a jiffy.

"'Why, Peg,' he said, 'I thought this seemed rather hard work. Come, and we'll fix you up!'" So

we went over to the side of the road while he gave me a drink of nice, smooth yellow oil that sent a pleasant tickle all through my bearings and made a new wheel of me. If there's anything pleasanter than drinking when you're dry I don't know what it is unless it's being pumped when you're flat. I do hate a flat tire—it takes all the life out of me!

"Well, he had me all right in a shake and was just clamping the tool-case, when on a sudden a scream cut the air from up the hill, a terrorized, chilling scream; then a grinding of wheels and the blue drop-frame shot by, and She was in the saddle: braced and crouched as if to dodge the danger ahead, with feet on the coasters and hands on the grips, a set white face and eyes as big as my bell, yet with mouth shut, to show she had not lost her nerve.

"It was easy to understand the situation. The drop-frame had run away with her, and it was a prize-cup to a monkey-wrench that they'd both go over the edge at the sharp turn an eighth of a mile below. He saw it, too,

and in two seconds after they passed he was in the saddle, and after them we went. Push—why, if he'd been going up he couldn't have pushed harder! 'Oh, Peg, Peg!' he moaned, in a desperate tone, that sent me shivering after the Special like a hound after a rabbit. What he meant to do I didn't know; but I guessed, and hoped I might be the only one to go.

"'Well,' I thought, 'I've never gone back on you yet, and I'll stay with you now, even for her,' and we gained another yard. Nearer, nearer to her and the curve, and then he sent his voice to her. 'Right, girl! Right, and stick in your toe!' (She never *would* use a brake.) The next moment we were beside them, on the outside. 'Lean in hard,' he cried, 'and get your toe on the tire!' And as he spoke we shot by a little till the Special's front wheel was at my fork. She tried to obey him, but the Special, clean mad, shied, wavered, and then—*crash!*—struck me square in the front forks. I felt him rise on the pedals, saw her half jump, half fall toward the inside of the road, and then—well, the rocks twenty feet below there were as hard as most; and you see my cranks and bars, and the hump in my back. Yes, he went over, too, just as she would have done if he hadn't been there, to head her off.

"I glanced around from where I lay, and saw him just trying to get up. Even then he was looking over his shoulder toward the road above; but he had hardly sat up when he groaned, his eyes shut, and back he fell again and lay still.

"In a minute or two there was moving up there on the road, and her face looked over.

"Her hair was flying in a tangle round her cheeks, and she was kneeling, resting on one hand, while with the back of the other she wiped away the blood that dripped from a cut on her white forehead and down across her cheek which was whiter still. For a moment the big, frightened eyes, dim with the danger just past and the new dread, swept around eagerly. Then she saw him and caught her breath with a sob. Twice she called his name, in a voice hardly above a whisper; but he never stirred. Then there came a gray shade of horror over her face; her eyes closed and I thought for a moment that she was

coming over, too. And so she did. Just how, I never could tell, but I had a glimpse of a shaking figure with a dirty, ragged gown and bloody face, climbing, slipping, scrambling, clutching its way down the side of the embankment, and then with a rush, a jump, and a stumble and a roll she was bending over him with her arm under his head, calling and talking to him as she never would if he could have heard her, I'll bet my rims. In a minute she ran to a little rill that trickled out of the hillside, and wet her handkerchief. The cold water brought him round after a bit. He looked up at her very contentedly, with a half smile. Then he saw the blood on her face. 'You're hurt!' he cried, and started up weakly. It took two or three minutes to bring him round again, and then, 'Did—did Peg get smashed?' says he. Smashed as I was I'd have gone through it again to hear him say that!

"Well, he didn't collapse again, though he had an injured leg and a big clout on the head and the wind knocked out of him generally. She wouldn't let him stir for quite a while. She bandaged him up, and they stayed there

and talked the thing over—that and some other things. Eh! 'What things?' Now, see here, Pedie, if you can't guess, you don't deserve to be told; and I wouldn't tell, anyhow. However, after a while, they started out, and somehow they got down to the next bend below, he leaning on her a good deal; and there they happened before long on a man in a carriage who took them home—and what do you think? Why, he wouldn't let that fellow go on till he'd crawled up and found me and brought me down, all smashed as I was, and loaded me in too. 'I couldn't leave old Peg,' he said. 'Just think, if it hadn't been for Peg'—and then they looked at each other.

It was a two-seater, and the man sat in front and drove.

"So that's why I sport a smashed crank and corkscrew handle-bars, and a backbone like a camel. Hope I haven't used you up telling about it. What's that? 'Why he didn't get me in shape and ride me again?' Why, that's as plain as my name-plate. He didn't ride at all for two months; and ever since then, they've been riding a tandem.

A GOLF LULLABY.

By Margaret Barbour.

O HUSH-A-BY Baby and shut thy blue eyes,
Thy father's a-golfing and hears not thy cries—
Thy father's a-golfing and mother must go,
So shut thine eyes, Heart's Love, and be not so slow.

O hush-a-by, Sweetling, and weep thou no more,
Thy mother must hasten to bring up her score;
Her putting and teeing and driving, Dear Eyes,
Must surely this day win the beautiful prize.

So hush-a-by Baby and dry thy tears up,
And thou shalt drink milk
From thy mother's gold cup—
So hush-a-by, hush-a-by, hush-a-by—low—
At last little Heart-Link,
Thy mother may go.

THE KILLDEER PLOVER AND HER TREASURES.

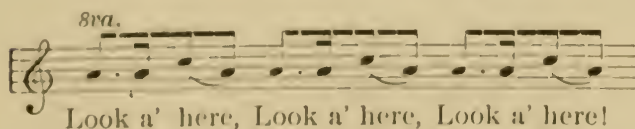
By Herbert Wendell Gleason.

Illustrated with photographs by the author.

AMONG the most welcome voices of early spring, although confessedly not the most musical, is the cry of the killdeer plover. Its plaintive accents echoing over field and meadow, form an harmonious part of the season's message, with the blue-bird's warble, the robin's roundelay, and the piping of the hylas.

The killdeer is a summer resident throughout most of the United States, though much more abundant in the West than in the East. In size it is somewhat larger than a robin, though with a much shorter tail and longer legs. Its plumage, while not brilliant, is very attractive. It is a bird of the open country exclusively, never being found in wooded districts. It is partial to the sand beaches along lakes and water courses, yet often seen feeding in upland pastures and cultivated fields. It is strong and graceful in flight, covering in small flocks vast distances in its migrations. Like all birds of the plover family, it is known to the unlearned as a "snipe," though it is but distantly related to that famous bird.

In its nesting habits the killdeer exhibits a remarkable combination of shrewdness and stupidity, of maternal devotion and fatherly fickleness. So far as its personal safety is concerned, no bird has less fear of man. It will approach within close range of the gunner and purposely call attention to itself by repeated cries. Yet this confidence in man by no means extends to sharing with him the knowledge of its nest; in fact, all its exhibitions of confidence have precisely the opposite intention. No other bird is so expert in deceiving the nest-hunter. Uttering its characteristic notes, it will fly along in front

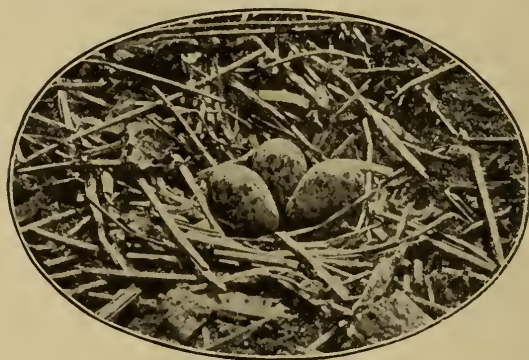


Look a' here, Look a' here, Look a' here!

of the intruder, and then, alighting on the ground within easy observation, nestle down in some little hollow, spread its wings exactly as if covering its

eggs, and look back over its shoulder at its supposed enemy with an expression as guileless as it is exasperating.

This pleasant fiction it will repeat as often as it is approached, and if one cares to follow the bird he will be led a



Nest and Eggs.

long and fruitless chase, only at last to see Mr. Killdeer fly up and wing his way into the distance, uttering a cry in which the nest-hunter has no difficulty in perceiving an element of derision. Meanwhile Mrs. Killdeer, most likely, has been sitting on her nest, complacently viewing the landscape and silently exulting in the successful strategy of her spouse.

But Mrs. Killdeer is not always wise, especially in the matter of the location of her nest, if nest it can be called, for in its construction she displays a studied carelessness. It is commonly composed of a few bits of straw or dried grass loosely put together in a slight depression of the ground, the choice of the particular spot being apparently determined by its exact similarity to a thousand other spots in the same neighborhood. The bird evidently counts upon this uniformity of conditions as a protection for her nest, and that this confidence is well placed any one will testify, who has once located a killdeer's nest and afterward tried to find it again. The coloring of the eggs, harmonizing perfectly with their surroundings, aids materially in securing this protection. Usually, too, the bird selects a spot on some elevated ground so that she can easily command the approaches.

Yet with all this evidence of sagacity Mrs. Killdeer most frequently locates her home in a cornfield—of all places in the world the worst, for the first turn of the cultivator is sure to bring it to light. And she will do this year after year. However, it is not fair to blame Mrs. Killdeer for this want of foresight. It could hardly be expected that her powers of reasoning would be equal to modern methods of farming. Possibly, after several more generations of experience, she will learn better.

It was my good fortune the past summer to enjoy a series of interviews with a pair of killdeer plovers, and, with the aid of a camera, to secure a number of pictures of the mother bird and her treasures. The nest was in a cornfield, on a slight knoll, and gave abundant evidence of the bird's art of concealment under circumstances where one would think no concealment possible. I visited the nest six different times, and although I kept its location thoroughly in mind, and before I had finished worn a pretty well-marked path to it, I had to hunt for it every time. It was placed midway between the rows of corn, and the sitting bird had not so much as a blade of grass to protect her from the fierce heat of the sun or the pelting rain.

Whenever I approached the neighborhood of the nest, the male bird would fly up from some indefinite spot, calling out as usual, "Look a' here, look a' here!" and then alight in a remote part of the cornfield. But finding that these tactics did not avail, he would return, and, giving utterance to a peculiar low rolling note, as if in distress, he would lie on the ground and flap one wing wildly in the air, exactly as if wounded and about breathing his last. The simulation was perfect. But Mrs. Killdeer fairly outrivaled her spouse as an actor. She would always spy me when I entered the cornfield, and long before I reached the nest she would slip away from it in perfect silence, giving no intimation that there was a nest, or the owner of a nest,

within a thousand miles. When she found, however, that I had actually discovered the eggs, she would appear a short distance away, and join her mate in the most frantic endeavors to appear mortally wounded.

Sometimes, then, she would run towards me and prostrate herself almost literally at my feet, spreading her wings and tail and displaying to the utmost her beauties of plumage, all the while uttering the most heart-rending cries, as if to say: "Here, take me! Do anything you like with me, but spare my nest!" I confess, while not much given to sentiment, and while perfectly aware of the bird's counterfeit agony, I more than once left the nest. A single step toward the bird would usually end the deception, and once I met Mrs. Killdeer's Roland with an Oliver. Right in the midst of one of her frenzied agonies, I put the back of my hand to my lips and made a squeaking noise, in imitation of a young bird in distress. Instantly her manner changed. Starting to her feet she came running towards the nest, uttering that peculiar note which she never makes except when



Brooding her Eggs.

calling to her young. I had a good laugh at her, and evidently she felt the point of the joke, for, seeing that her eggs were safe, she paid no attention to any further "squeaking" on my part.

Most birds are very shy of a camera. It is a new kind of enemy (evidently they construe it as such, being in the hands of man), and they don't know what to make of it. I have known many instances where a bird has deserted its nest altogether rather than return to it when "covered" by a camera.



The Nest in a Cornfield.

My method of procedure was very simple. I knew, of course, that the bird would not permit me to approach near enough with my camera to take any sort of satisfactory picture. So long as I was in sight she would keep away from her nest. So I tried the experiment of operating the exposure from a distance. After securing the camera firmly in position, at such distance from the nest as I desired (varying from eighteen inches to twelve feet, according to the length of focus used and the size of the image wanted), I focused it carefully on the

nest, drew the dark slide from the sensitive plate and set the shutter. Then, having tied a long string to the lever used as a release in operating the shutter, I carried the other end down through the cornfield to a small grove of maples distant about two hundred and forty feet. Here, screened behind a low-branching tree, I took up my position and, field-glass in hand, watched proceedings in the vicinity of the camera.

At first, both birds seemed very suspicious of this strange object set up so near their precious nest. They would walk all around it, look up at it inquisitively, with that curious bobbing of the head so common among birds of the wading tribe, then run off to some new view-point and again return. The lens—the monster's eye—seemed the most terrible thing about it, and they would hasten by the front of the camera as if to avoid its glance. But after a while both apparently concluded that it was not seriously dangerous, and soon the male flew off to a distant meadow. His mate, after some further cogitating, and doubtless with many misgivings, at length returned to the nest and brooded her eggs. As soon as I felt sure that she was fairly on the nest I gave a sharp pull to my long string, and the bird jumped to her feet with a sudden start. Had my camera actually "gone off" and the click of the shutter alarmed her, or had she seen merely the movement of the string?—birds are usually more afraid of motion than of noise.

I went in haste to see. Yes, the shutter had worked properly, and there was doubtless some kind of a picture on the plate. Replacing the slide and exposing another plate I again closed the shutter and returned to my post of observation. This time Mrs. Killdeer, probably discovering that she had been more frightened than hurt, came back to her nest with less apprehension in her manner than before, and I soon had another exposure.

These pictures were all instantaneous, no exposure longer than a twenty-fifth of a second being attempted. Two weeks later, the corn meanwhile having grown, I took a second series of pictures and was delighted to find Mrs. Killdeer so accommodating as to permit a number of time exposures, varying from one to two seconds each.

A few days later I again visited the cornfield, but this time there was no killdeerian protest: the eggs were gone. No trace of them remained and it was almost impossible even to identify the spot where they had lain. Had some wanton boy discovered and added them to his "collection," or some prowling skunk feasted on them? Or had my efforts at photographing the mother bird, compelling her to leave the nest so frequently, caused the eggs to spoil and the nest to be deserted? This last suggestion gave me a qualm of conscience, which was relieved the next day, when, passing through a wet meadow some distance from the cornfield, I heard a familiar voice, and there stood Mrs. Killdeer as self-assertive and prone to deception as ever. Better still, I heard a faint "peep, peep," coming up from the grass, and scanning the meadow through my field-glass I soon discovered two young killdeer hopefuls, in their curious downy coats, toddling over the grass toward their mother. The young killdeers, like young chickens, are able to run about as soon as they are hatched.

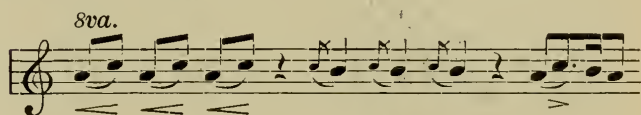
After considerable searching—for the young birds are adept at hiding—I captured one of the little fellows and took his picture. He would persist, however, in remaining in a crouching attitude, and consequently did not appear to the best advantage. On setting him free he quickly found his mother (or rather she found him), and it was touching to see how tenderly she brooded him. Ah, that mother-comfort! It is the same whether in bird or beast or human. There is nothing else like it in all the world.

I have spoken of "fatherly fickleness," as manifest in the killdeer's nesting habits. This seems a cruel charge to make, yet I know of no other explanation of the facts. Killdeer *père* is loyalty itself during the nesting period, even sharing with his mate the task of incubation; but as soon as the eggs are hatched—in every case that has come under my observation, at least—he leaves the care of the young entirely to their mother, and consorts with various boon companions on some distant lake shore or meadow. Mrs. Killdeer not only accepts the situation without a protest, but if her quondam mate dares to show his presence near where the

young are feeding she will at once pursue and drive him away, with a manner not to be misunderstood.

Time and again have I witnessed this strange proceeding, and often the mother bird has deliberately left her precious charge in close proximity to a Horrid Man and given her attention to chastising her own spouse and driving him from the neighborhood, as if he were the greater enemy of the two.

But whatever of paternal remissness there may be in the killdeer family, it is more than offset by the superlative devotion and self-sacrifice of the mother. I know of nothing more complete in its expression in the whole realm of nature. Even as I write these closing words, far up the beach I hear a familiar call, strenuous, yet plaintive, both a warning and a protest,



and I know that Mrs. Killdeer is still guarding her little ones.

Little they are no longer, for they are now five weeks old, and nearly as big as their mother, able to fly with ease and to take care of themselves. Yet the mother heart still watches over them, ready at any moment to give up her life in their defense.

Is not such devotion worthy of comparison with human standards?



One of the Treasures.



"TO THE TOP OF A BOWLDER RUTH MADE HER WAY,"

AN EVENED SCORE.

By E. W. Sandys.

WE met in rather an odd manner. To be candid, we met under water — several feet under water—and we did not come across each other any too soon to suit Ruth.

It was this way: Two seasons ago a little party of us straggled into Bensonhurst and decided to linger a while and have some swimming. Those who know Bensonhurst know that it is a pretty but quiet resort, where a lot of decent people dwell and enjoy a very pleasant time. There is no surf, the water as a rule being as calm as a pond, but it is salt water, and you may swim a mile or a yard, as you prefer.

The evening of our arrival a lot of us went for a swim, and while I was idly floating a few yards beyond my depth, there arose a sudden storm of feminine voices. Clearly something was wrong, and before I could decide what it was somebody kicked me violently and I realized that a woman was below the surface hunting for air in the most unpromising of localities. To go under, find the misguided explorer, and restore her where she belonged, was a trifling matter.

That was the beginning of what has proved a delightful friendship. She wanted to learn to swim. I agreed to teach her, and so it came about that for some portion of each day I was the temporary guardian of that young woman.

All this was a trifle, but it led to something of much greater importance. It turned out that her people had a pretty country-place in the best fishing district of New York State, and after we had become better acquainted, I was cordially invited by her father to kill some of his trout the following spring.

Months slipped away. Now and then we met in the great city, and a few letters were exchanged. At last came that time which every trout fisher knows so well. Something in the air hinted at spring's approach, and it became absolutely necessary that I should spend my evenings examining tackle and fussing with flies. Finally came a note which reminded me of my promise of the previous summer to my Bensonhurst friends.

I shall not soon forget that day. Sunrise found me on the platform of a lonely little station which looked like a ship floating in a sea of forest. Spring had been there before me, for green points were thrusting up from the damp soil, and frogs were singing in the ditches beside the track. The dull-eyed operator had told me that Mr. L—— would presently be on hand with his trap, so I paced the platform and reveled in the beauties of a perfect morning. The air was soft, faint tinkles of bird-music came from adjacent thickets where buds were swelling, and I seemed almost to hear the rustle of things growing. No jarring tirade of milk-wagons, no shuffling of hasty feet speeding to toil. Here was that sweet morning rest, where things wake and move as their natural promptings direct. But above all the day looked trouty, smelled trouty, and proved to be trouty.

"Hello! How are you?" sung out a voice, and turning, I saw my host swinging a showy cob around a corner. "Tumble in," he continued. "We've got five miles to cover, but this fellow will make short work of it." I stowed my stuff, took my seat, and the cob whirled us away at a spanking gait. The drive alone was worth the trip.

Given a faultless trap, an exceedingly picturesque rolling country of alternate forest and clearing, a fine road, and a cheery comrade, and there is precious little else to desire.

It does a man good to rise with the sun in the wilderness; it does him good to drive five miles to his feed, and to finish the drive at a handsome, modern bungalow, where he finds a dainty lady, a well-drilled servant, and an exceedingly palatable breakfast, all awaiting him. Camping is well enough in its way, but when it comes right down to solid comfort, I confess that I prefer an odd thousand-dollar tent, with shingles on it, a refreshing session in a handsomely-appointed morning room, and a breakfast without the ashes and the sand and the other dainties which are characteristic of the amateur cookery and of life in the snowy tent.

Think of the average camp breakfast, and then conjure up a picture of snowy

linen, dainty china and gleaming silver, presided over by a shapely grey-clad figure in short skirt and oil-tan wading boots; give a peachy bloom to a pair of cheeks, and a winning sparkle to a pair of eyes, and over it all cast the indescribable atmosphere of genuine pleasure and suppressed excitement which surrounds a pretty woman who is going fishing.

Within ten minutes after breakfast we were swinging down the road, and it did me good to see the pace Ruth set. No question about her health or supple strength. The low-heeled, rationally soled boots patted the ground in measured cadence, to which my ungainly limbs kept time without mincing. I furtively weighed the lunch-basket and wondered how far it might be to the stream, for the life of Gotham does not tend to keep nimbleness and endurance under a gray head-thatch.

Our tramp proved a shorter one than I expected, for presently she climbed a fence and led the way across a field to the woods. As we entered the heavy growth she exclaimed, "Isn't this just heavenly!"

It was. The air was laden with sweet, woodsy odors, and through the trees came the musical murmur of falling waters, and the bubbling laughter of a stream among boulders—a sound which has never been imitated except by that marvelous, golden cascade of song which the bobolink pours over sun-kissed meadows.

We soon reached the stream, which proved to be considerably larger than I had expected.

"Hello, this is quite a water," I remarked.

"Yes," replied Ruth, "and there are trout in it too—don't you be astonished if you hook a three-quarter pound fish—I've done it more than once. "And," she continued, "there is a pool about a mile below that you must try. Big fellows, perhaps more than a pound, live in it."

I placed the lunch-basket in a safe spot, and soon the rods were ready. This part of the stream was full of big boulders, but there was plenty of room for casting with a short line. To the top of a boulder Ruth made her way, and presently my ear caught the hiss of the silk.

One glance assured me she was no novice, while a second, and, to be frank,

a much longer observation, revealed the fact that she was the appropriate central figure of an exceedingly pretty picture. In the foreground, the divided waters merrily struggled between the opposing boulders; above them the stream broadened into a lazily moving expanse, with magnificent shadows; beyond that it was lost in a curving corridor of trees, the branches of which almost met. Above, a narrow ribbon of sweet spring sky, from which fell through the branches sunshine, as in liquid form, to spatter the moist land with molten gold.

And in the central foreground, poised upon a mossy stone, a lithe, trimly-clad figure, swaying to and fro with fearless grace, and with a suggestion of the supple power of the puma, ever keeping time to the song of the silk as it went and returned. It was pleasant merely to note the way the tan boots appeared to take hold of the stone they rested upon; something about them betokened perfect confidence. And I thought how suitable is the gentle craft to our women.

My musings were cut short by a sudden click of branches, immediately followed by a muttered exclamation which sounded very much like the words "darn" and "knit" jumbled up together. Ruth had fouled a branch behind her. It proved, however, an easy task to free the hook, and then she insisted I should go to work.

I moved a proper distance and soon rose and missed a tidy little fish. Before I could redeem myself, I heard the shrill of the reel and saw Ruth fighting with a captive. She played him very prettily and had him landed before I could offer assistance. No nonsense about her methods—she grabbed the fish, unhooked him, looked at him a moment, then deliberately popped him into her basket.

Four very fair fish were killed and a couple missed before I had covered one hundred yards of water; then I waited until my fair comrade came along in quest of unfished territory. Her catch numbered six, all smaller than my best one, so she was quite satisfied with the honors about even. But my downfall was coming.

As frequently happens in trout-fishing, she appeared to stumble by the merest accident upon a pool full of hungry fish, and in about five minutes

had added three fine ones to her basket, while, try as I would, I could raise nothing, although my pool might have passed as the double of the one she was fishing. Such is luck, and at last, thoroughly convinced that my station was no good, I laid down my rod, filled my pipe, and went to her.

A sharp exclamation, a scream from the reel, followed by a heavy splash, told me that Ruth had struck something good. She was an exceedingly busy young woman for the next five minutes, and her hat wasn't on straight, either. The fish was a hurricane fighter, and dashed about the pool as though he had firmly resolved to force matters to the promptest of settlements.

"Hooked foul?" I inquired, as I noticed the tremendous drag.

"No; it's a big one!" gasped Ruth, as she gave him the butt and skilfully turned him from a boulder he was earnestly striving to reach. She made another pretty picture, only now the mood was different. All the old Adam in her had become thoroughly roused; her eyes flashed from below a serious frown, her cheeks were scarlet, and a row of pearls was firmly closed upon the lower lip. Ruth was fighting in earnest and would not be interfered with. To and fro darted the fish, while the rod arched till I almost held my breath, fearing that it might smash. But every rush was warily met, and every inch of silk was bitterly disputed by the smooth wee wrist, which seemed to be strung with wires.

Slowly the fish yielded, and I whistled in astonishment when he at last lazily rolled for a moment on the surface. A few minutes more of fierce zig-zagging, and then the game fellow gave up and showed all his war paint as he feebly fluttered a fin above the water.

"Work him this way," I said, as I slipped down to a shelving rock, the one convenient landing-place. Keeping him steadily moving, with a careful strain she towed him almost within reach, when—to my horror, the gut parted!

Taken wholly by surprise, Ruth lost her balance, uttered a scream which would have done credit to an angered panther, and sat down hard upon a very uncompromising mass of rock.

The fish made a weak attempt to right himself, and was beginning to slowly drift off, when reaching far over I made a des-

perate open-hand strike at him. To my joy I hit him fairly, sending him whizzing through the trees, while an agonizing pain shot up my arm. In the excitement of it all I had put about ten times the required force into my effort, and a finger-nail had encountered an unnoticed point of rock. Those who have lost half a nail by accident will understand why that right hand, blood and all, promptly sought the left armpit, while the owner of it did some new jig steps and hissed like a snapping-turtle.

"Pat—pat—flop—" we could distinctly hear the fish threshing about in his death struggle.

We found him about twenty yards from the water, and a prize, indeed. He was not so very long, being an unusually broad-backed and deep one, but his coloration was superb, and as he waggled a pearl-bordered, crimson fin we fairly gloated over him. He weighed at the closest calculation fully one and one-quarter pounds, while, owing to his stocky build, he may have gone one quarter pound more. Be it known that Ruth was the proudest young woman in all York State.

My wounded finger throbbed in such an exasperating manner that there was no further pleasure in manipulating a rod, but Ruth's heart was set on my seeing the big pool she had spoken of. Partly from curiosity and partly to humor her, I agreed to go on, although I had no idea of trying another cast.

The big pool proved to be everything she had claimed for it, and I eyed it keenly. Broad, black, and solemn looking, spangled with huge ox-eyes of bubbles, and bearing a fleet of yeasty masses of foam, like miniature icebergs, it was the ideal spot for a lusty trout. At our side of it the water was about four feet deep, at the farther side much deeper. Over toward the deeper part was one moss-covered boulder, and sweeping behind it a restless tail of yellow suds.

"There's where your boss trout would lie," I remarked, and pointed at the boulder. Naturally enough my eyes followed the line of my finger. While I looked there came a slow, oily roll on the surface near the boulder, and I caught a passing glimpse of a fish that appeared to be as long as my arm. Ruth's quick gasp proved that she too had seen him.

"G-r-e-a-t Gee-hosophat! Don't move an inch!" I muttered—"he's a sturgeon!!" and the finger was forgotten as I hurriedly prepared to send a message to him.

When it came to casting the hurt bothered a bit, but I managed to get about where I aimed for. Once, twice, in vain; but a third attempt produced a sluggish, rolling rise. I struck hard and missed. The fish was not keen, and his half-hearted attack led me to expect little of him. We gave him ten minutes law, but he took no notice of four carefully judged efforts. We gave him five minutes more. Then I took a trout from the basket and removed one of its eyes to serve as an additional bait inducement.

I hated to do it; I could hardly look at Ruth, but I was determined to kill that fish. Ruth nodded approval as the eye was added to the hook; then I cast a few feet above the boulder and let the bait drift. In a moment there came the faintest of shocks from the line, and involuntarily I struck. The rod bent like a whip, the line stretched as tense as a banjo string, and I groaned in despair, thinking I was snagged.

Just then the "snag" started majestically for the upper region of the pool, and Ruth excitedly screamed, "Oh! crickey, you've got him—you've got him!"

"There is a tide in the affairs of men," and if ever one of the men gets tied to a brother of this fish he will understand the sort of a séance I had for the next five minutes. It was indeed an odd fight. The fish calmly sailed about, turning indifferently when I put the brakes on him, but coming not one inch nearer. His actions at first more than half convinced me that I had hooked him foul, but presently a change came o'er the spirit of his dream. I believe in forcing the fighting, so I shook him up vigorously, and we had it up and down the pool for five minutes.

He appeared to be extremely anxious to reach a certain spot near the outlet, where an irregular ripple suggested rocky points near the surface. Ruth ran around to spy out this possible dan-

ger, and it proved a lucky move. There were rocks there, and the rascally fish knew it.

For a few moments more I handled him as roughly as the tackle would stand, and I was positive that I had him conquered. But I did not know his capabilities. He suddenly began a series of fierce jerks, the last of which turned my hand so that the pressure came full upon the injured nail. It hurt me so much that for an instant I was compelled to relax my grip. The foe was alert, and at once he turned tail and steamed away for the outlet.

Realizing my unfortunate slip, I strove to turn him, while the rod fairly squeaked under the strain. For half a minute I held him, then there came a snap and the silk flew through the guides—broken at the reel!

Ruth screamed with disappointment—but she saved the day after all. Right toward her station slid the fish, and her quick eye noted the trailing line just below the surface.

"Don't! for your li—" I yelled, as I divined her intention; but before I could complete the words she had jumped in and seized the silk with both hands.

Luckily she landed on her feet and remained upright, although in water which curled about her waist.

"Bully for you—hang to him!" I cried, as I dashed to the spot.

"Take it—quick—*please!*" He pulls like a horse," spluttered Ruth, as she swung the line nearer my hand.

I did take it, and now, thinking it all over in cold blood, I surmise that I should have been killed for doing so, instead of leaping to the rescue of beauty in peril.

The fish was still on the hook, and his last effort evidently had completely exhausted him, for I hauled him in hand-over-hand without a protest. He was a beauty—a plump two-pounder—and we drank to the finest fish ever taken from that pool.

Then Ruth asked, smiling bewitchingly, "Does that square up the Benson-hurst item?"

THE THOROUGHBRED RACING SITUATION.

Arthur F. Bower.

IT cannot be doubted that the racing season of 1900 will be one of exceptional activity in the United States. The long lists of entries for the various stakes that have been closed already, the reports from the stables, indicating a remarkable increase in the number of horses fitting for turf struggles, the announcements in different quarters of newcomers whose colors will be seen for the first time; the preparations which the associations both in the East and in the West are making—all show clearly that the owners, trainers, jockeys, and friends of the thoroughbred will have plenty of matter to keep them astir before the runners retire for the winter.

Since last autumn many thoroughbred skirmishes have been decided on the Pacific coast and in Louisiana, but few animals of lofty prowess have taken part in these affairs, and the interest aroused in them has been chiefly provincial, except in the matter of pool-room betting, which is a serious evil in so many American cities.

California contains more than one course ample in area, carefully laid out, and provided with capacious and well-designed buildings. Does anyone doubt that racing on the Pacific Coast has reached the standard of the best sport in the East? The tracks of the Golden State are wonderfully fast, and amazing records are set forth there for animals which, when they come East, usually fail to meet the expectations so carefully diffused concerning their speed. In former years colts and fillies of high renown have vied with each other west of the Rocky Mountains. Nevertheless, California racing has not always maintained the vigor, the breadth, and the dash which characterized it during the era when Governor Leland Stanford, J. B. Haggin, Senator George Hearst, E. J. Baldwin and others actively sought turf honors.

Mr. Stanford produced exceedingly agile runners at Palo Alto as well as marvelously fast trotters. Mr. Haggin has owned and raced several of the most eminent flyers in the annals of the American turf, including Salvator and Firenzi. He has been for years the

most extensive breeder of thoroughbred stock in this country, and probably in the world. The annual outcrop of his stud farm is enormous. He sells most of his yearlings in the United States or in England, yet he has not given up altogether his direct participation in the races, for it is generally understood that he practically controls troops of runners which are trained and handled by G. B. Morris, Walter Jennings, and others. The Haggin colors, however, are no longer borne by the sons and daughters of noble sires, and the absence of those colors from our tracks is much regretted. Governor Stanford and Senator Hearst are no longer among the living, and the E. J. Baldwin stable, which in one decade laid hold on a dazzling galaxy of the most important and valuable prizes between Sandy Hook and the Golden Gate, has fallen upon evil days, and is no longer an element of consequence.

Every unselfish and zealous admirer of thoroughbreds is convinced that racing in this country has been extended to an injurious excess; and that it would be better for true sport, for the reputable jockey clubs, and for the genuine prosperity of the turf, if the number of meetings and the number of contests were cut down unsparingly. During six days in the week, month after month, no matter how unfavorable the weather might be, the runners were sent spinning around the New Orleans track, until more than one hundred days were misused. This weary continuance of so-called sport at a single track is never beneficial, and at New Orleans its influence has been gravely deleterious. It is painfully obvious that if there were no pool-rooms in our cities there would be only a few days, at the most, of racing in Louisiana in the winter. It is also clear that the promotion of betting has been in recent years too much the predominant motive in the management of the Pacific Coast tracks.

Before the period of pool-room gambling and the establishment here of the English system of book-making, the sport which holds so strong a place in the affections of so many people among the principal nations of the world was

looked upon with kindly feeling in this country. Now professional gamblers are more offensively and audaciously conspicuous and influential in the New World than they are in England or on the Continent of Europe. This state of things is pernicious.

Before our civil war famous horses met in thrilling strife for supremacy; yet, while the speculation on the issues was lively, it was felt by everyone that the wagers were by no means the chief matter to be thought of. Since pool-rooms and betting-rings began to flourish and increase, suspicion and distrust have extended far and wide. There is indeed plenty of reason for censure and reproach with relation to the betting abuses which have done so much to provoke hostility to racing, and to bring upon it the condemnation of so many earnest friends of the public welfare.

It is strange, then, that the owners of race-track property, and the men whose power in turf matters is almost irresistible, do not appear to concern themselves anxiously in respect to the evils which have been swelling, and which threaten the future of the sport.

The dates already published for the meetings which are to be held this year show that there will be too many race days and too many races. Americans are always eager to support with genuine American generosity racing of high quality and sterling merit. Nevertheless common sense teaches that four days of racing in each week, and a total of twenty days in each year for every organization of weight and strength would provide an adequate supply of excellent diversion, and would revive the glories of the generations when the commercial spirit and the greed for gain had not hurt the fame and weakened the popularity of this magnificent sport.

Efforts to check the evil of the inordinate running of two-year-olds appear to have failed for the present. This is lamentable from every point of view. It is a cruel practice to compel colts and fillies to run a great number of races while they are immature and have not reached an age when they are equal to the tremendous strain of so fierce and furious a tussle as a hotly-contested race must always be.

In Great Britain it is the custom to send the youngsters to the post only a

moderate number of times between March and December. In the illustrious roll of winners of the Epsom Derby few names appear of colts that have been required to exert themselves to the utmost in the heart-breaking strain of numerous two-year-old contests.

In France the racing rules as to two-year-olds are even more conservative and cautious than in England. It is forbidden by the French rules to start two-year-olds to any such extent as is the custom in the United States. Many owners and trainers in America are so impatient to get quick returns from their investments in horse-flesh that they have no mercy for the tender creatures which are forced to suffer agony in dozens and even in scores of sinew-stretching fights when they ought to be in their stables.

It is time for the Legislatures of the various States to take up this matter, since the associations will not themselves adopt a stringent policy and suppress the cruelty so prevalent here. The two-year-old stakes in America are far more numerous, and much more valuable, than they ought to be. Thoroughbred colts and fillies ought not to be looked upon as sordid gambling instruments, or as mere tools of trade. These beautiful and graceful animals should be treated with decent consideration. It is discreditable and disgraceful to the American turf that so many colts and fillies are over-raced in their infancy—that so many are lamed and crippled and made useless.

It is evident that there will be no lack of horses in training to meet the requirements of the huge number of stakes and purses that must be decided before the close of the year. The season of 1899 was notable for the exceptional array of two-year-olds that gave proof of quality and merit. Therefore it may be anticipated that the stakes for the three-year-olds will bring together handsome fields, and will surpass the exploits of the last season in popularity and attractiveness.

In recent years the State of New York has taken a higher place than any other State in the Union for the importance and distinction of the thoroughbred battles fought here. The tendency among the prominent owners to send the best horses from all parts of the country to the richest and most populous of the States has become steadily more marked

and impressive. In the eighties and in the early nineties Illinois and New Jersey set up no mean rivalry to the Empire State in the lustre of turf achievements; but all the courses in New Jersey have been desolate for years, and most of the racing in Illinois has suffered an eclipse.

Washington Park, in Chicago, was the meeting-place in 1892, in 1893, and in some other seasons, of the finest thoroughbreds that could be gathered from any region of this hemisphere. The gambling evil aroused so much enmity, however, that the gates of this park were shut for a considerable period. Now the Jockey Club owning those convenient and spacious grounds within easy reach of the business and residence quarters of the second city of America has opened stakes for the closing summer of this century, and will attempt to carry on racing with methods and policy similar to those which gained laurels in the hours of greatest turf prosperity in the West. And yet the re-opening of Washington Park will not prevent the sending from the South, the Southwest, the middle West, and even from the Pacific Coast, of the finest animals in training to cope with the choicest stock of the Eastern stables at Sheepshead Bay, Gravesend, and Morris Park.

Turfmen are looking forward to many a combat which will provoke a generous rivalry between the East and the West. They are also watching with keen scrutiny the outlook for American horses in England. It is a singular situation. One of the foremost candidates for the English Derby is an American gelding named Democrat, who won the Middle Park Plate in 1899, and whose performances throughout last season were of such a nature as to justify the hope on the part of his friends that he may follow the triumph of Iroquois, and that for the second time America may take the blue ribbon of the British turf. In Forfarshire and two or three other candidates for the Derby, Democrat will meet formidable rivals. It may be that he will prove unequal to the task of capturing first honors. Even if he fails it may be said with truth that American horses have been running so well in England of late years, many seasons will not pass before an American horse for the second time wins the Derby,

and the prospect is sufficiently bright to keep up the enthusiasm for thoroughbreds of American breeding.

Some well-known jockeys, who have had extensive experience this side of the Atlantic, have been riding in England, and the list is to be enlarged this year. Sloan has exhibited such excessive vanity, and in some instances, has so completely disappointed his admirers, that he is no longer spoken of here or abroad in such terms of adulation as were formerly lavished upon him. Some of the other American riders in Great Britain have been more modest, more faithful, and more diligent, and have made an excellent impression upon British owners and trainers. In more than one case, jockeys who have crossed the Atlantic have manifested more ambition and earnestness to do their full duty than was their habit when they were riding on American courses. The change of air, of scene, of environment and influences has been beneficial to them. Too many of our jockeys are on familiar terms with professional gamblers of the lowest type. No intelligent person who has studied the subject can doubt that many of our riders have succumbed to the temptations which have so plentifully beset their paths. The severe discipline meted out by the Jockey Club last year, when it put on the ground more than one jockey in the foremost rank, is ample proof of this.

Rigorous discipline is indispensable in turf affairs, and watchfulness ought never to be slackened. Unless the administration of the turf is exacting and severe the sport is sure to be beset with scandals. The work of purification and disinfection has not yet been carried to the point necessary to obtain the best results. Unscrupulous owners, trainers, and jockeys take advantage of leniency or looseness among the racing authorities, and are guilty of sins of omission and commission which ought to involve them in the direst penalties that the turf officials can inflict.

Momentous changes may be looked for at no distant day with regard to the turf organizations in the metropolis of the new world. In the area of the several boroughs composing the city of New York, there are no less than six courses on which running races will be held this year. The six are Morris Park and the Empire City track above

the Harlem River, Sheepshead Bay, Gravesend, and Brighton in the Borough of Kings, and Aqueduct in the Borough of Queens. The organization controlling the Empire City track is a novice among the associations which provide for the contests of the thoroughbreds. This property was laid out for trotting purposes, and was equipped on a liberal scale. The unfortunate death of William H. Clark, who was at the head of this enterprise, must inevitably embarrass, to some extent, the future of the undertaking. It may next year take a position of influence somewhat approaching that now held by Sheepshead Bay, the property of the Coney Island Jockey Club, which is sure to be used for a number of seasons. But Morris Park is becoming too valuable to be retained for sport; within a period not remote it will be divided up and sold. It is certain also that the Gravesend course must within a few years give way to the extension of streets and avenues and the march of real-estate improvement.

Certain wealthy turfmen who are not now holders of race-track stock have

been uneasy for a long time because they felt that some of the tracks were managed without due regard to the interest of owners, and with an avarice that was by no means pleasant to contemplate. These rich owners have been holding conferences as to the advisability of laying out a new course on Long Island which will be in every way the peer of any course now in use in America. It is probable that this ambitious plan will be fulfilled within a few years at most. The men who have this enterprise in mind are possessed of ample resources, are inspired by commendable motives, are open-minded, of breadth of view, and are overflowing with enterprise and resolution. Long Island seems to be the place most advantageous for the race-courses of the future within swift approach of the great Borough of Manhattan; and early in the new century the turfmen of the United States may count upon racing their horses under the government of organizations which will have higher aims, and larger sympathies, than are possessed by some of the men who control the tracks now in use.

HOW TO BECOME A GOOD GOLFER.

By H. Vardon,

Open Champion of Great Britain.

A FIRST-CLASS golfer is born, not made, and unless a man possesses certain necessary physical qualifications, no amount of teaching will make him into what he was never intended by nature to be.

Given, however, a man with a fair amount of strength, a good eye, limber muscles and an even temper, if he will follow certain rules, which I will suggest to him as having proved very useful to me personally, I see no reason why he should not become a first-class golfer.

In the first place, supposing that he has no previous knowledge of the game, let him go to some good professional and learn from him how to swing a driver—he ought not to be allowed to hit a ball before he has taken at least three lessons in swinging. When he has learned to swing properly, then let him practice driving with a ball. After

learning to drive let him then learn how to use a brassey, then his cleek, and so on through the whole bag of clubs. When he feels that he has some knowledge of the various clubs let him go out and practice over two or three holes back and forth, and not until he has learned how and when to use all the different clubs would I allow him to play around the course.

In regard to style, play in whatever style is best adapted to your own physique. The faults of a bad swing can be seen and corrected just as well when occurring in one style of swing as in another, and unless you feel free and easy and comfortable, you will never swing properly.

There is one point, however, about which I feel very strongly, and that is, I would urge everyone to play off the right foot, and not off the left. I don't

think there is any doubt but that you can play straighter and follow through further and better and consequently get a longer ball off the right foot than is possible off the left.

When you are playing, always try to take a little ground with your club ; by "taking a little ground " I don't mean dig your club into the turf, but just graze the ground, and you will get a much longer and straighter ball than if you took it perfectly "clean." When driving take the tee with the ball.

When playing any kind of a shot, whether a long brassey through the green, or a mashie pitch, always try and fix upon some spot where you think the ball ought to drop and endeavor to strike as near that spot as you possibly can.

Never pitch a ball on an approach shot, if running it up will do just as well. It is very much easier to gauge the force necessary to run a ball a given distance than it is to calculate the necessary force to give it to pitch around a certain spot and to gauge the amount of run required to land it near the hole after the ball has stricken the ground.

Putting is a most important matter in any match, for it is very easy to lose a stroke or two on the putting green, and a missed put counts as much as a topped drive. A good plan is to select some spot which catches your eye in a direct line between your ball and the hole, and endeavor to run your ball over that spot. If your line of direction has been accurate and the ball is hit by the blade of the putter exactly at right angles to the line of direction, you ought to hole your put.

Never try to put cut or twist on your ball with your club, unless there is some very necessary reason for it, such as a stymie by a tree or something of that sort. It is an absolute impossibility in my opinion to get as good direction with a cut on the ball as is obtained by playing the ball straight.

Tee your ball high or low according to whether you intend to carry some bunker at a long distance or whether you intend to get a low ball with lots of run in it.

I don't believe in training for a match. I think a man's normal condition, always supposing that he is in good health is the state in which he is most apt to do himself the greatest justice, as his

nerves are not then upset by any sudden change from his usual manner of living, and he is less liable to be affected by the various accidents which are always occurring during a match.

Do not get discouraged just because you happen to start out poorly. Most matches are not less than eighteen holes, and there is plenty of time to recover from one or two bad holes ; always remember you are not playing against Colonel Bogey, and the other fellows are just as liable as you to be doing as badly as you are before the match is over.

Keep in constant practice, play as often as you can ; and don't be always changing the style of your clubs. When you have discovered by actual playing what models suit you, stick to them until you know them thoroughly, and don't imagine just because you have seen some man make a wonderful shot with some particular club that, because you go and buy one like it, you can necessarily do equally well. The more you play with the same clubs the better you will use them.

Never underestimate your opponent at match play ; always play your very best, for you can never tell when he is liable to make a sudden spurt.

Be temperate. You cannot play golf well and drink hard ; sooner or later it will affect your eyes, and your power of judging distance and hitting your ball accurately will be lost.

Finally, I want to again impress on anyone who wishes to become a good golfer the lasting importance of having the arms and feet work together. Unless they do, you can never become a long straight driver. Remember that after addressing the ball with the club head, as the arms go up in the upward swing you pivot on your left foot, your arms and your left foot in perfect time, one with the other, until at the top of the swing you are on the point of your left toe. As the club comes down, the left foot pivots back to its original position when you addressed the ball, and at the moment when the club head strikes the ball the left heel touches the ground. As the club begins to rise for the follow through, you commence to pivot on your right foot, foot and arms moving together in perfect time, until, at the end of the follow through, you are on the toes of the right foot, and the stroke is finished.

THE "CUNNERS" OF CHESAPEAKE BAY.

By A. J. Kenealy.

I HAVE always believed that, for the service for which they are built, special types of boats used in various parts of the world cannot be improved upon. The surfboat of the Madras coast, the Penzance lugger, the Malay prau, the Norwegian praam, the Cape Cod catboat, the Norfolk wherry, are all examples which go far to prove the general truth of my proposition, although they are but a few stray samples selected at random from a large fleet of widely divergent craft. The "cunner" of Chesapeake Bay is my latest experience in the same line.

In all countries whose coasts are washed by the sea, the "dug-out" craft was doubtless one of the earliest. Given the trunk of a tree of sufficient size for the purpose, it is not difficult to imagine pre-historic shipwrights lopping off the branches and the bark with rude axes or adzes of flint, and then with the same crude implements, aided by fire, hollowing out the interior.

The nearest approach to the ancient "dug-out" which I have been able to discover is a boat very much in evidence in Chesapeake Bay and its tributaries, fast, able, and seaworthy, and well adapted for business and pleasure. In the vernacular of the natives of that part of Virginia they are called "cunners" or canoes.

I shall never forget my first view of one under full sail. I was standing on the dock at Old Point Comfort. Behind me the guns of frowning Fort Monroe. In front the sparkling waters of Hampton Roads. A puffy wind was blowing that made big coasters snug down to small canvas, and heel over to its potent pressure. Suddenly there hove into sight from under the lee of one of Uncle Sam's armored cruisers a swift-sailing craft the like of which I never had seen before. She was a double-ender carrying a big leg of mutton mainsail, with a very short gaff, or rather club, on a mast with as decided a rake aft as that of a Bermuda boat. Her only head sail was a jib, the tack of which was fast to a stump bowsprit, whose end projected three or four feet outboard.

A sharp squall struck her. I expected to see everything come down by the

run, but neither sheet nor halyard was started, nor was the boat luffed to the blast to shake the wind out of the sails, while running away from it seemed to be the last thing in her skipper's thoughts. She was kept a good rap full right through it, and the way she stood up was surprising. Instead of careening until the lee rail was under, her angle of heel was very slight, showing that she had great stability. There was an angry chop of a sea running—nasty steep little waves, but she rose to them like an Irish hunter to a stone wall, and only a little spray came over the weather bow. I watched her as she darted past the wharf, so much charmed with her movements that I kept a pair of marine glasses directed on her until she disappeared.

In "The Description of Virginia," by Captain John Smith, published in 1607, I found the following account of the canoes of the Chesapeake: "Their fishing is much in Boats. These they make of one tree by burning and scratching away the coles with stones and shels, till they have made it in forme of a Trough. Some of them are an elne deepe and 40 or 50 foot in length, and some will beare 10, 20, or 30, according to their bigness. Instead of oares, they vse paddles or sticks with which they will row faster than our barges * * * Their fire they kindle presently by chafing a dry pointed stick in a hole of a little square peece of wood that firing itselke, will so fire mosse, leaues or anie such like drie thing that will quickly burne."

There is no doubt that the canoe, or "cunner," which exists in such numbers on the Chesapeake, is built on the same lines, and after a similar fashion, as the pre-historic craft described by Captain John Smith. But instead of being formed from one big tree, as was the custom in the days of the Indian aborigines, another system of construction quite as interesting has been adopted. When the sap flows down to the roots of the yellow pine trees in the Virginia woods the canoe-builder searches for a likely specimen that he thinks can be hewn into a smart sailing craft. When he comes across a pine that suits him he fells it, raises it up from the ground and

rests it on blocks in order that damp and wet may not affect it; and there he leaves it to dry and season until the following spring, when it is hauled to the builder's "yard," near the water's edge. The "yard" is quite primitive, and the chief tools used are saw, axe, and adze. The canoe varies in length from 26 feet to 35 feet, and in beam from 6 feet to 8 feet, according to the size of the logs from which it is to be constructed.

The builder is guided by the eye alone, and the rule of thumb. He has no plans on paper to consult, any more than had his red-skin prototype back in the ages, but, nevertheless, he produces a craft that is very "fair" and "sweet" as to its lines, and thoroughly reliable so far as its sea-going qualities are concerned. Of course, some builders are more in demand than others, having won renown because of the speed of their craft. The captains and crews of these boats are, as a general rule, Afro-American fishermen, who, eager to first reach the market with their catch, are as keen for racing as their yachting brethren from Deer Isle, Me., or their rivals on the Clyde or on the Colne, and they naturally want the fastest boat they can get for their money.

It is remarkable how quick the canoe is builded, but when the fact is taken into consideration that the hull is fashioned out of but three pieces of timber, which may be approximately described as keel and two garboards, it may be seen that the process is not tedious.

The log selected for a keel is sawed to the required length, and trimmed to a width of three feet and a thickness of from four to six inches. When the size of the log permits, it is hollowed out so that the stem and the stern post are made of the same piece of timber. This is generally sought for, as the builders have an objection to stem and stern posts bolted to the keel proper. When this portion of the boat is hewn into shape with axe and adze the garboards are cut each from another log and worked so as to fit perfectly to the keel-

piece. Their thickness is about three inches, so it will be seen that the hull is exceptionally strong and solid. The garboards are next fitted to the keel, and after a close joint on either side is assured, are connected with strong iron bolts. The stem is generally from six to eight inches higher than the stern, and the freeboard varies according to the length of the craft, which is sharp at both ends.

Now a vessel so shallow—the largest draws only about fourteen inches—would be no good for sailing against the wind. She is, therefore, fitted with an oaken center-board, which works in a hardwood trunk built into the keel-piece. The center-board is from six to eight feet long, and is made of well-seasoned stuff, an inch or more in thickness. The rudder, which is also of oak, is hung to the stern post by pintles and gudgeons in the usual way. The canoe is steered with a tiller. It will be seen from the illustration that the "cunner" has a marked "tumble-home," that she has a "washboard" or waterway fifteen inches wide extending the whole length



Photo by Dr. Titus.

Interior View.

of the vessel. This is supported by natural knees of hard wood. In addition to this the "washboard" has a coaming of sufficient height to keep water out of the boat. The hull, when completed and painted, looks graceful and rides the water buoyant as a duck in spite of the thickness of the three timbers of which she is built, which

ing been out in her in all weathers, varying from a flat calm to a reefing breeze. My Afro-American skipper understood her perfectly. He could bring her up alongside the gangway of a man-of-war without exciting the least anxiety on the part of the marine on sentry duty at that post. The ease and grace with which he executed this difficult manœuver in



Photo by Dr. Titus.

The "Cunner" under Full Sail.

would, it might be judged, have a tendency to make her dead and "logy."

I am informed that there are a few of these boats still in existence that are hewn out entirely from one tree trunk. I am also told that the builders would prefer to build them that way even now, only yellow pine trees are too precious and rare to be used for such a purpose.

It may be mentioned that the builder does not rig the craft. He leaves that to the owner, who steps, at a rake of about twenty degrees, a mast about the same height as the boat is long. This spar is stayed by a wire shroud on either side and a forestay, which is set up at the bowsprit end. The bowsprit is secured by a wire bobstay, set up with a turnbuckle, and it is sometimes further strengthened by bowsprit shrouds. The boat is very stiff, and carries an ample spread of sail. It is a peculiar circumstance that in many respects the "cunner" resembles the Bermudan boat.

There is no doubt that these canoes abound in good qualities. I had capital opportunities of observation, having had one of the smartest of them under charter for thirty days during the naval celebration at Hampton Roads and hav-

heavy weather gained the admiration of foreign naval officers who had often had excellent reasons for contemning the lubberly handling of shore boats in various parts of the world — handling which too often resulted in damaging the gangway ladder, chafing the paint on the ship's side, and sometimes driving the truck of the boat's mast through one of the warship's boats, hoisted up to the davits. In a word, my skipper handled his canoe with the expert facility of the captain of a Newport catboat or the skill of a cockney cab-driver. Higher praise cannot be given.

I would not, however, recommend a novice to try experiments in a crowded tideway, for the consequence would probably be disaster or, at least, mortification of the spirit. The canoe of the Chesapeake is a flighty and wild kind of craft, with a tyro as timoneer, but in the hands of a master is tractable and obedient, and can be steered through the eye of a needle. It takes some little time for even a practised boat-sailer to get the hang of her and conquer her peculiar peccadilloes, but when once you have succeeded in learning the tricks and devices with which she tries to annoy a green hand at the tiller, you will find her quite docile and obedient, pleasant to steer, and easy to handle.

From September to May a large fleet of these boats is engaged in the oyster-tonging business—an industry which affords satisfactory subsistence to their crews. The weather is rarely too bad for the hardy boatmen and the seaworthy craft to ply their arduous calling, so the planting grounds are usually plentifully dotted with these graceful boats, whose crews busy themselves from dawn until the approach of dusk, when they set sail to the nearest market.

After the oyster season closes the

boats are hauled out high and dry for repairs and painting. They are given a good general overhauling from truck to keel. Those that are intended for use in the fishing industry are fitted with two wells abaft the centreboard trunk, formed by athwartship watertight bulkheads, which are as high as the waterways. Salt water flows freely into these wells through holes bored below the waterline, and fish will live for several days in these receptacles. Races to the markets are keen and exciting, as competition is brisk and the first boats in are likely to get paid the highest prices. Fresh fish for breakfast is in great demand at the big hotels and health resorts, and the waters of the Chesapeake and vicinity afford an abundant variety of sea food.

Of the fish Capt. John Smith wrote as long ago as 1612 :

"Of fish we were best acquainted with sturgeon, grampus, porpus, seales, stingraies whose tails are very dangerous. Brettes, mullets, white salmonds, trowts, soles, plaice, herrings, conyfish, rockfish, eeles, lampreyes, catfish, shades, pearch of 3 sorts, crabs, shrimps, creuises, oysters, cocles and muscles. But the most strange fish is a smal one so like the picture of S. George his dragon as possible can be except his legs and wings: and the toadefish which will swell till it be like to burst, when it commeth into the aire."

Although the greater part of the "cunner" fleet is employed all the year round in the oyster and fish industries, a few, comprising the crack boats of the Chesapeake, deck themselves out in all the glory of new paint and varnish with spotless sails and interior scrubbed so clean that it looks like a new pin. Thus attired they seek the patronage of the hotel guests who flock to Old Point in the early spring in search of health and recreation. Early in March the breezes on the Chesapeake begin to grow balmy, and while in New York the culverts are blocked with snow and ice, the lilac is blooming near Fort Monroe and the crocus brightens the verdant lawns.

It is then that the smart "cunner"

skipper begins to gather a bounteous harvest. You can charter his craft by the day or the hour, and if handled with tact you will find him an easy fellow to get along with.

Of course if you look very green-horny he will try to take advantage of your simplicity and will charge you rather a steep price for the privilege of the use of his boat and his own invaluable services. For this reason make a contract with the captain before you embark and you may rely upon his keeping his part of the agreement.

Chesapeake Bay is an ideal boating water, and the reason why it is not a much greater favorite with yachtsmen may be that only shoal craft can fully investigate its beauties. There is plenty of water deep enough to float the biggest ironclad in existence, but the creeks and little tributaries are shallow, and as these are the best resorts for fish the "cunner" becomes invaluable to the sportsman

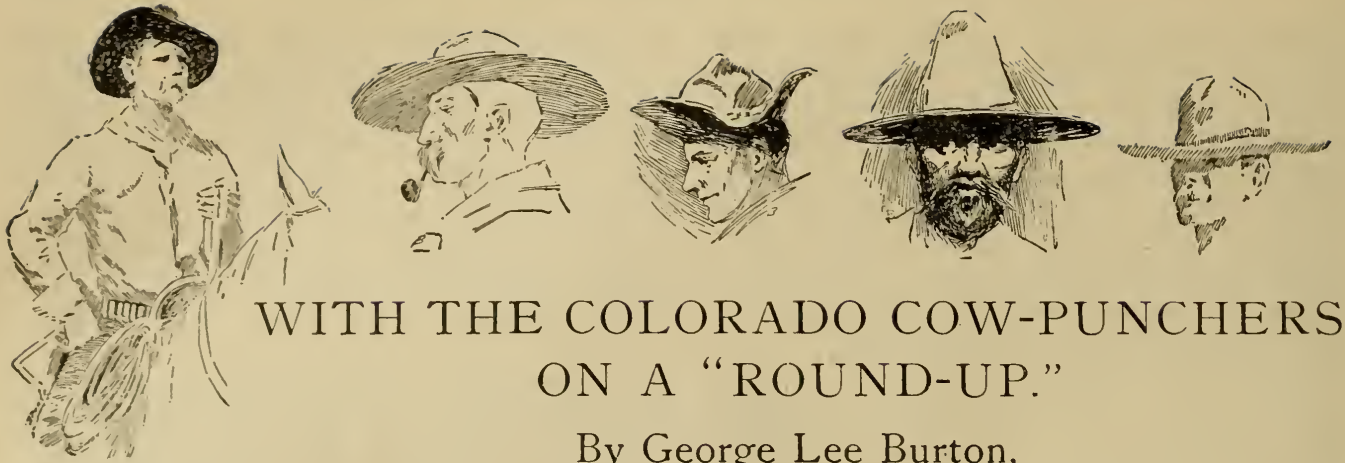


Photo by Dr. Titus.

Hauled Out for Painting.

tourist. A man might pass April, May, and June very pleasantly in these waters. In that case it would pay him to buy a "cunner" of his own, and if he should take as great a liking to the craft as I have, he might bring her to New York by the inside passage (or outside if he preferred, she being "puffically safe") and sail her the rest of the season on Long Island Sound.





WITH THE COLORADO COW-PUNCHERS ON A "ROUND-UP."

By George Lee Burton.

INSTEAD of being the dare-devil, rollicking, ripping and shooting melodramatic heroes whom dime-novel youths delight to gloat over, the cowboys of to-day are in fact valuable, though picturesque, citizens of the commonwealth.

They are drawn from many States and from many classes. The cultured representative of an old family who has gone West in search of health, the restless adventurer, the fortune-seeking youth, the son of the Western-drifted laborer, and the native-born ranchman, the Mexicans and half-breeds—all are represented.

Cartridge belts and six-shooters occasion no comment, but shooting is rare, and the cow-punchers as a class are a hearty, hospitable, alert set of men. They themselves are perhaps more amused than anyone at the ideas people "back there" have of them.

The ranges over which they operate are vast tracts of government land—rolling prairies and cañons, with cedars in some places and occasional cottonwood trees along the creeks, where the cattle range and graze. The land is watered at intervals—sometimes at long intervals—by creeks and springs. The cattle go where the grass and water are, and in winter drift with the storms, so that Colorado cattle are often found in Kansas, Oklahoma, New Mexico, and Texas. The cattle must, therefore, be hunted every summer, the calves marked with the owners' brands, and if the droves have drifted too far it is necessary to bring them back to a range nearer the home ranch.

These cattle hunts keep the cow-punchers busy in their season. The first hunt, a calf hunt, starts about the beginning of June, and lasts six weeks or two months, though the largest cattle

companies make even longer searches. Then in the fall the steer hunt is made, and the steers are brought in for shipment; any calves found on this hunt are also branded.

A few of the largest companies, with 40,000 or 50,000 cattle on the range, keep a small outfit all winter, going over the ranges and branding any of their calves that they find unclaimed.

The center of life on a round-up is the "outfit," the large four-horse wagon that carries provisions, bedding and tents for the men. These outfits are run by certain stock men or companies, and are named from the brand, as the "J J outfit," the "V O X outfit," the "O V outfit." Six or eight men and their mounts of horses may be furnished by the company, one of the company's men being in charge and directing the movements of wagon and hunt each day; but usually a number of other cattle men send representatives to look after their interests, attend to the branding of their stock, etc., and these men work with and under the wagon boss, like his own men.

In the back of a "cow wagon" is the cook's locker, where the tin plates, cups, spoons, and iron knives and forks are kept. Here, also, are the "sour-dough" light-bread, salt and sugar cans, dried Mexican beans, coffee, tea, and certain dried fruits, which our Mexican cook used to work into delectable puddings and pies. The sack of flour and the fresh beef that remains from a yearling killed the day before, are carried in the bed of the wagon.

A cow-puncher's bed consists of a couple of comforts, a thick cotton mattress, or perhaps one stuffed with hair clipped from the manes and tails of broncos for a foundation, three or four blankets, and a large canvas wagon-

sheet spread on the ground underneath all. A "war-bag," containing clothes and tobacco, rests under his pillow.

When the wagon stops and camp is pitched, a great canvas sheet is put over the wagon and stretched over posts several feet out at the back—the cook's domain—and four or five feet on each side. This tent-like arrangement affords a shady, sociable spot to the hot cow-punchers when they come in from the surrounding sunburnt country. Under this covering with heads toward the wagon the tentless cow-punchers make down their beds. During a rainy night, beneath the wagon itself is a desirable place.

Shortly before four o'clock in the morning the cook rises, and commences his day by making a fire in the little trench at the end of the wagon-sheet near the rear of the wagon. The black two-gallon coffee pot is swung into place on a hook over the fire, and certain preparations are made that result in light "sour-dough" rolls, the best of bread, fried beef, Mexican gravy, or possibly chili (the Mexican pepper), and steaming coffee.

The men turn out of their tents, and roll and tie up their beds until they are some two feet in diameter and four feet long, and thus are packed ready for breaking camp.

Hastily making use of washpans, they respond promptly to the cook's brief but telling announcement of "chuck." No time is lost, but order is preserved, and the old cook's warning to the tenderfoot just before announcing a meal, "Stranger, you had better climb a wagon wheel; I'm goin' to turn these fellers loose," is entirely unnecessary.

There is a rattle of tin and of iron, and soon each man has stooped down by the fire, filled plate and cup, and on the ground or on one of the rolled beds found a place where he can eat, answer the sallies of his companions, glance at the sun coming up quietly and quickly—without the heralding splendor with which he appears in a more moist atmosphere—or watch the horses as they are driven up to the rope-corral.

As each man finishes eating and drops his empty plate and cup into the dishpan sitting upon the "sour-dough" keg, he takes his rope—lasso, the Easterner may call it, but the name is never heard in the West—and steps out to the corral.

Here one hundred and fifty horses are waiting expectantly, rubbing noses or quietly crowding—bay and black, blue gray and sorrel, dun-colored and white coats together, eying the men with loops in their hands, wondering if they will escape going on the "circle" this morning.

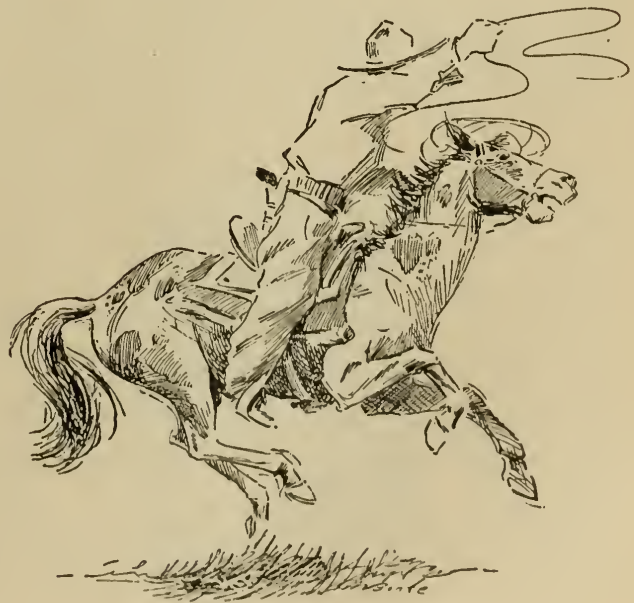
Each man has a "mount" of six or eight horses, for, with his hard riding, frequent changes are necessary, and the same horses are not used every day.

When each man has his horse saddled and two or three have pulled the wagon sheet, loaded the beds, hitched up, and helped the cook finish packing (for he is driver also), the wagon and little horse-herder, with his horses, start for the next camp, six or eight miles distant.

Then all the mounted cow-punchers gather round the wagon-boss. He plans the hunt for the day, sends the men out on the "circle," as they call it, and directs what part of the surrounding cañons and open country each squad of men shall hunt.

A cañon is not necessarily a valley with parallel perpendicular walls of stone. It may be several miles long and a mile or two wide; may be smaller or larger. Along the sides in places may be ledges of rock, in other places steep, green-covered slopes, and here and there openings—draws, arroyos, or side cañons sloping to the level. In the flat or rolling country any deep hollow, often with a half-dry water-course through it, is a cañon.

While one party of three or four is sent up one cañon to look up the arroyos for cattle, scattering at inter-



vals to reach out in different directions up the gullies and higher ground beyond, and circling and driving the cattle found into a common bunch before taking them to the round-up near the camp, another party is working another cañon, and a third is out on the open country southward.

By nine or ten o'clock the different detachments, with their bunches of cattle, are usually at the place appointed for the general round-up or rendezvous.

Meanwhile the camp has been pitched near a creek or spring, or rain-water hole, and the horse-herder has brought the horses near the round-up. Here not even a rope-corral is set, but the horses are kept "rounded up," or bunched, while the cow-punchers ride over and select fresh ones. Each usually takes his best cutting horse to drive out of the herd—"cut out"—the cows with unbranded calves, or the cattle that are to be guarded in the day herd and carried back nearer their home ranches.

A wide, open space is usually chosen for the round-up, and for a long distance you can see the dust rising from underneath the feet of the restless, shifting cattle, a cloud of dust that seems to make the burning heat of the sun more intense.

When you get nearer you hear the lowing of the uneasy cattle as they move around in bunches, crowding closer upon each other to escape the pursuing horse. Cows with dilated eyes and outstretched heads call anxiously to calves, as the answering youngsters crowd to their sides. A restless bull paws the light soil into dust, the clear sunlight bringing out the mottled red and white, black, roan, and occasional yellow of the living, shifting mass of color and form.

All these things may be noticed by

one helping to hold them up if they be not unusually restless; but the cow-puncher who is "cutting out" cattle has no time for these things. He, with keen eye and alert faculties, rides straight into

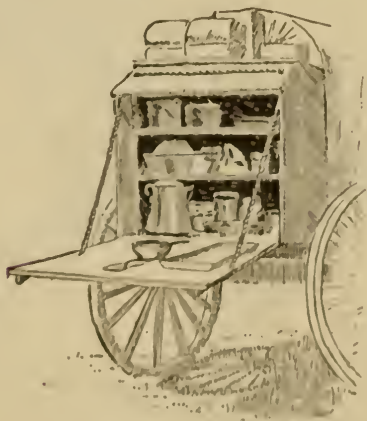
the bunch and selects a cow and calf to take out. The old cow-pony moves mechanically until a cow is chosen; then he too is all alertness, following her up, turning and twisting with her every movement until he gets her out of the herd with calfie bellowing uneasily by her side.

When the cows with unbranded calves are all out, the cutters ride through the herd again, to get the cattle that are to be put into the day herd, and the cow-puncher's quickness of vision and action come especially into play, as he watches the various ear-marks and brands of the different cattle. First they look out for the pattern of the ear-marks they want, "right cropped," "left swallow forked," etc., etc., because the ear-marks are more easily seen in a moving mass of cattle than the brands on the right or left side; but the ear-marks are frequently duplicated and consequently are not final proofs, as are the individual brands.

When the cows with calves for branding have been separated, and the day herd has been augmented by the fresh additions of drifted cattle, the men ride to the wagon to dinner, and to the shade with its cooling breeze. Breezes by day and cool nights are characteristic of this climate, even in warmest weather.

If a great many cattle have been found during the morning, and the men with bunches have gotten in late from the circle, if 1,500 or 2,000 cattle have been looked through and sorted, dinner is apt to be late—two or three o'clock. But to even earlier dinners the men, after six or seven hours in the saddle, bring appetites and digestions a dyspeptic might crave.

After dinner and a short rest on the ground or on the rolls of beds under the spreading wagon-sheet, fresh horses that have been grazing all the morning are gotten from the rope-corral near by. Then the men, with a branding-iron



or two swung over their shoulders, go out to the business of the round-up.

The branding-irons are rods some four feet long with the end worked into a distinctive design, an **O**, a **J**, a straight bar, a half **n**, with which letters, figures, and countless combinations can be made.

In a short time the fire is burning and the irons are hot. The tally-book is intrusted by the wagon-boss to the one who tallies that afternoon—a post considered of great honor. Six or eight men stand or sit about, near the fire, ready to flank and hold the calves when their turns come. The horses, trained (by bridle-reins passed over the head and trailing the ground from the bits) to stand anywhere, are near by, now pricking up ears and watching a bellowing calf, now drooping heads and resting, or rubbing noses against the shoulders of the other horses.

Several mounted cow-punchers keep the cows and calves well bunched, while two or three ride in among them and rope the calves. The roper notices carefully the brand of the mother, and as soon as he finds the loop has fallen over the neck of the calf he wants, he heads his horse for the group by the fire. The rope tied to the horn of his saddle becomes taut as the bellowing, kicking, plunging calf, with popping eyes and some discomfort, is dragged, in spite of all his surprised resistance, down near the fire.

Two of the men stand alert and ready to receive the calf. One of them "flanks" it, *i. e.*, catches it by the rope around the neck or by the ear and the flank, and turns it over on to the ground, on its side, simultaneously

sitting on its neck and holding its uppermost front leg. Another man seizes it by the hind top leg, and bracing his foot against the under hind leg, holds the calf securely while the brand is applied, the ears marked, and the little bull calves made steers.

The mother following her baby may run down a few feet from the herd, but being a wild-range cow, she does not dare follow him far toward that formidable group of men, horses, and fire.

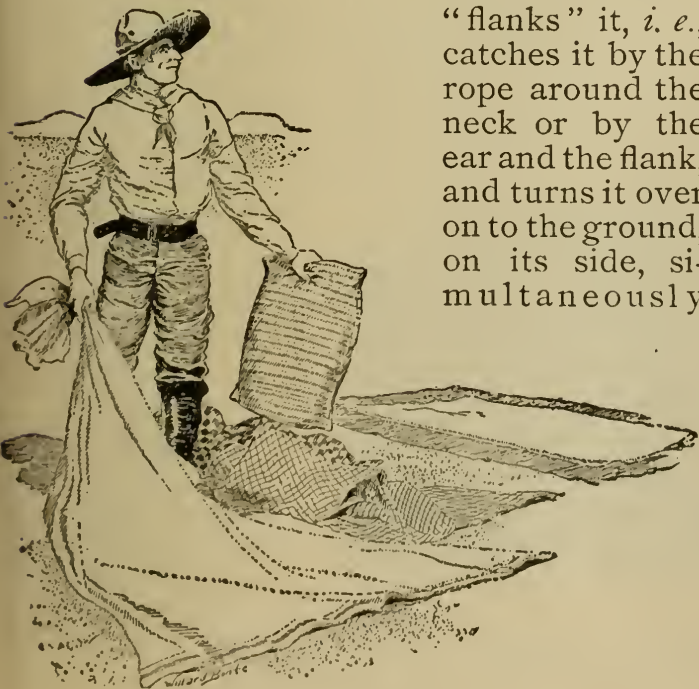
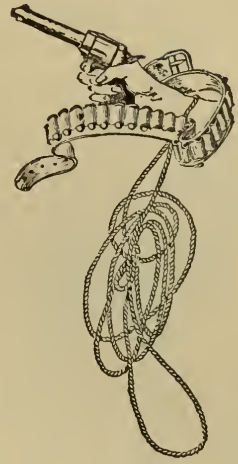
Brands are registered at Denver with the Secretary of State to prevent duplicates being used, for taking another man's brand means taking his stock on the range.

In the ear-marks cutting off the tip of an ear is "cropping" it; cutting off of the front of the ear a slanting slice to the tip is "oversloping"; cutting off a corresponding piece of the rear of the ear is "undersloping." An ear with a small piece cut out of its tip, leaving a sharp angle, is "swallow-forked"; one with a piece cut out of the rear part is "underbit."

Ear-marks are convenient, and are universally used; they are registered with the brands, but they are not the final test, as the same ear-mark is used by more than one man.

When the branding-iron has singed its way through the calf's hair into its skin, and when the man with the knife has done his work, the released youngster, marked for life, goes scampering back to its mammy. She looks at it, and snuffs its singed hair. What is this odd thing that has happened?

If she is very certain and very motherly, she may low soothingly and lick over the smarting brand. But if a foolish young three-year-old, she may snuff, and then look wildly away, for a moment mistrusting her eyes, thinking it strange that though it looks so like her calf, it smells so different, and has a little blood dripping from its ears. Soon, however, she realizes that evil man has wrought this change, and that she must make the most of her youngster in its present condition.





When all are branded, the cows and calves that should be taken back to the ranges near their owners' ranches are cut out and taken to the day herd, while the rest are set free.

The cattle in the day herd are guarded day and night to prevent them from straying away, and are moved with the camp each day. During the day they graze along slowly.

A guard of two cow-punchers is constantly with them. The length of guard in day time is half a day; at night, two hours. There are four night watches of two hours each, beginning at 8 P. M.

After the branding is finished, unless the day has been an unusually heavy one, there is time for a rest at camp before supper. Tents are stretched, men lounge around, talk, joke, and smoke after their hard day's work.

Sometimes a spring near by and wild

currant or gooseberry bushes claim the attention of the men; sometimes an exciting wolf chase, in which they try to run down and rope the wolves, makes them forget their previous long hours in the saddle.

After supper the horses are in the corral again, and the men who will be on night watch to take care of the day herd until morning, pick out and saddle their mounts.

The dusk closes round the wagon with its sheet, the remains of the cook's fire, the tents scattered around, and the night horses, bridled and saddled, standing motionless with hanging bridle-reins, or bending their heads for an occasional bite of grass as they move slowly around the stake ropes to which they are tied.

The camp goes early to bed, for it rises with the dawn. The order in which the men are to be on guard is determined, each man finds where his relieving guard sleeps that he may call him, and soon all is quiet under the wagon sheet and tents, while the air takes an added freshness, the stars in the cloudless sky blink sleepily, and the coyotes in the distance fail to disturb the sleeping centaurs.



THE CHARR TROUTS OF AMERICAN WATERS:

THEIR RANGE AND LURES.

By William C. Harris.

FROM the middle of the fifteenth century, when Dame Juliana Berners wrote and printed the first book in the English language on the subject of fishing, to the middle of the nineteenth, when the Father of American angling, Thaddeus Norris, gave us his "American Angler's Book," the fishes of the salmon family have been looked upon as the most worthy by anglers. Not, I think, entirely because of their acknowledged game qualities, but rather from the conditions under which they are captured and the skillful methods and delicate tackle used in bringing them to the creel or gaff.

The refining influences of the environment of an angler, too, when on a mountain trout stream may have something to do with placing the fish above the plane of those of sluggish or even placid but purer waters. Be this as it may, the trout has been and probably always will be, more eagerly sought by fly-fishermen; and they do not have nowadays to travel afar, for owing to profuse planting and the better observance of the law protecting them, the trout streams are numerous and the fish increasing in numbers.

In the April issue of *OUTING* the salmon trouts were treated at large. I have now to do with the charr trouts of American waters.

All the American charrs, with the exception of the Dolly Varden (*Salvelinus parkeri*) and three of the Arctic species, are native to the waters east of the Mississippi, the common brook or speckled trout (*Salvelinus fontinalis*) being the most widely distributed. Fish of this last species may be known at sight by the worm-like markings on the back, red spots on the sides, their large mouths, blunt snouts, and the mottled or barred darkish coloration on their dorsal and tail fins.

Salvelinus is the most beautiful of all the charrs, by reason of the mantle of rose and violet which it wears, the mellow diffusion of which from gills to base of caudal, at once suggesting and justifying the descriptive phrase so often applied to it by anglers—"the bloom of

the trout." Nor is one's admiration lessened when one examines its clipper-built form, the bright vermilion dotlets with their dark blue areola, the strength and symmetry of the paired fins and the broad sweep of the propeller-like tail; and when we have one hard and fast upon a barbed hook and a springing rod, we the more readily appreciate its knightly qualities, its sturdy resistance, and its keen intelligence.

The brook trout is found in the streams flowing north into the Arctic ocean, as far west as Victoria Land; ranging north and westward to the tributaries of the Great Lakes, and as far south as the southern spur of the Georgia Alleghanies. It also occurs near the sources of some of the rivers flowing into the Mississippi river and the Gulf of Mexico. It is not found in waters holding the Dolly Varden species of red-spotted trout.

The habits of trout have elicited much discussion, and no rule of constants can be laid down in definition or explanation of their idiosyncratic moods and traits. One angler finds them on the shallows, another in midwater or in the boil of the rapids, and again lying in the deepest water of the pools. To-day they are leaping and flashing in mid-air, apparently feeding on midges; to-morrow lying perdu under sheltering banks or rocks, darting out upon their prey, and the next day the most tempting lures cannot entice them to feed. Often as the shadows are gathering over the stream, they may be seen coming into the air with the slow and measured leaps that a porpoise often makes in his lazy but symmetrical arch-like movements. At such times they do not feed, and seem to be coming into the air for hygienic or sportive reasons only.

Another interesting trait and one that has puzzled anglers and savants, is that of change of coloration under varying conditions. It is a recognized fact that trout in deep dark water assume the color of it, the red spots, however, becoming more brilliant. In moderately shallow pools their color becomes lighter; and when feeding or lying on the light-

colored sand at the mouth of the brook-lets, they assume a silvery tint which pervades the entire body, the red spots becoming dimmer and the worm-like markings on the back less defined and more diffused. I have taken trout of three different colors in a stretch of the stream not more than one hundred feet in length. The conditions were a deep pool in the centre, a rushing rapid at the head, and a shallow sand-bar at the mouth of a rivulet which flowed into the pool. The fish taken illustrated the changes of color as stated above, the most striking of which occurred when the trout was seen to pass from the deep water to the sandy beach at the mouth of the little stream. Within the time occupied in counting twenty, it assumed a bright silvery appearance, which also appeared on the dorsal and other fins, although not to such an extent as upon the body. The red spots could not be seen, although the trout was in pellucid water less than ten inches in depth.

Apprehending that the condition was a delusive one, arising from refraction, I cast for and caught the fish and found my first impression correct. It was a beautiful specimen, and approached very nearly in coloration to that of a fresh-run sea trout—*immaculatus*, "without spots," in this case nearly so. The coloration is certainly involuntary, and is a safeguard that nature has provided the trout against the kingfisher, fish-hawks and other enemies. In this connection, Seth Green, who was one of the most practiced and observant of fish culturists, advanced an interesting opinion:

"It is my opinion that the change in the coloration takes place or is adjusted through the organs of the eye; and the reason I give for this peculiarity is that nature has so ordained that when a trout becomes blind he shall turn black, or nearly so, and his color remain the same when on light or dark bottoms. To my mind it is very clear for the above reason that the change in color must be transmitted through the eye. If this were not the case, I do not understand why the fish becoming blind should have the effect upon the color as stated."

Seth Green might have still further illustrated his theory by stating that the common brook sucker also becomes nearly black in color when blind. I

have seen many of them in this condition when I have been fishing in large trout streams. Occasionally the brook chub undergoes the same transformation. Yet, strange as it may seem, salt-water fish, as a rule, bleach, when blind or dead; at least such has been the appearance of those coming under my observation.

Trout spawn in a manner similar to many other fishes of the salmon family. They mate and the male keeps off intruders. The female uses her tail in making the nest, whipping the gravel until a hole is made about two inches deep, and then cleans the bottom for a foot or more around the hole. When she is ready to spawn, the male knows it by some language, as it were, of their own and approaches her. The ova are then dropped and the milt is deposited upon the eggs, the male being within a few inches of his consort. But many of the eggs fail to become fertilized, dropping down stream on the current; they are devoured by minnows or other fish who are lurking in the vicinity unnoticed by the male trout, who is absorbed by his spawning instinct. Probably not five per cent. of the ova dropped on natural spawning beds ever mature, while of those raised by the improved methods of the fish culturist fully eighty to ninety per cent. come to maturity in the hatching ponds. Unfortunately those raised by the artificial process are generally placed, when fingerlings, in streams abounding with their natural enemies, and but a small percentage of these innocents become yearlings, at which age they are able to take care of themselves.

From the time of Walton to the present day at least one thousand volumes have been written about the trouts and fishing for them; and it would be idle in this brief monograph on the charr trouts to attempt more than a scant outline of the characteristics of this beautiful angling fish, to lure which men have pack-traveled for days into the most inaccessible mountain ranges, have braved the storms of treacherous March and waded strong waters filled with boulders, where the slightest misstep would whirl the rodster over precipitous falls or thrust him into whirling currents beyond recall. Hence a few notes on the accepted methods of luring and creeling the brook trout (*fontinalis*)

and we will pass on to the other species, most sought by American anglers.

Trout are taken with the garden worm, the grub, the live minnow, and the fly. Of these only the last is recognized as a legitimate lure by the angler, who is disposed to rebel when the name of fisherman is applied to him. This term, or epithet, so considered by the craft, can be justly annexed only to the man who goes a-fishing to yank fish out of the water, to the pot or market fisherman, or to the wharf or log fisher, who divides his time between sleep and his bottle of liquid bait, oblivious of the frog perching upon his float, which is often nearly as big as a lager-beer keg, and to the blue heron complacently sitting upon the adjacent bank swallowing the worms with which the somnolent fisherman has baited his hook.

The use of the artificial fly as a lure for trout comes down to us from the old Egyptian days, long before the era of the Roman rule; and the master of the craft, old Izaak, instilled the art of using it in his devotees, and the spirit of his teachings has guided the tastes and methods of his disciples for centuries.

The Dolly Varden trout (*Salvelinus parkeri*), as has been stated, is the only charr trout native to the waters west of the Rocky Mountains. It is found in the streams east and west of the Cascade Range from the Upper Sacramento to Montana. The origin of its popular name is said to be as follows: A lady fishing on the Upper Sacramento happened to catch one of these trout, and, struck by the variety and dazzling colors upon its body, exclaimed, "Why, this is a Dolly Varden!" in allusion to the variegated and flashing robes worn by one of Charles Dickens' heroines. There are two species of this trout, one found only in Alaska and Kamtchatka and the Dolly Varden before named; both of these species are surface feeders, hence take greedily the artificial fly when thrown to them. I have caught with the ordinary trout flies, in size and color, the Dolly Varden in the streams of Idaho, and found it a good quarry to creel, fighting bravely but not leaping from the water when hooked. In broad contrast to its pretty name of Dolly Varden, in many sections it is known as the "bull trout."

The charrs are represented in Maine

and New Hampshire by the Sunapee trout (*Salvelinus alpinus aureolus*), which, after much discussion and argument, has been formally classed as an American charr, closely allied to those of Europe, but peculiar in its coloration and other characteristics. It is nearly identical with the European saibling, and Professor Garman believes that it was introduced from Germany. The study of this fish is a very difficult one, as the specific differences are slight and the individual variations surprisingly great, but the consensus of opinion among ichthyologists centers upon the belief that it is a native fish very closely connected with the Oquassa or blue-back trout. It is certainly one of the most beautiful of charrs.

This beautiful charr is as good to eat as it is good to catch. It reaches a weight of ten pounds, and rises freely to the fly in May and early June, after which, as the water grows warmer, it settles into deeper water, and in July and August takes a live minnow and fights finely at a depth of fifty to sixty feet.

The Oquassa or blue-back trout (*Salvelinus oquassa*) is the smallest and one of the handsomest of the charr trouts. It never exceeds twelve inches in length, and seldom grows beyond ten. The coloration is dark blue, the red spots small and round, and usually confined to the sides of the body. Its habitat is confined to Mooselucmaguntic Lake, of the Rangeley system, in Maine, although Professor Merriam states that identical fish have been caught in the lower St. Lawrence River weighing six or seven pounds.

The blue-back lies concealed in the deep water during the greater part of the year, but about the tenth of October comes near the shore and ascends in shoals the Kennebago River for the purpose of spawning. Half a mile above its mouth the Kennebago receives the outlet of Lake Oquassa; the trout then leaves the Kennebago to the left and runs towards Oquassa Lake, when its voyage comes to an end. About the middle of November it goes back to Mooselucmaguntic Lake and is seen no more until October of the next year.

The blue-back resembles the Sunapee trout more than any other of the charr species, yet differs from it in size, spawning habits, and markings of the

young. The largest blue-back definitely known weighs only a few ounces, while the Sunapee reaches ten pounds in weight. The blue-back is a slenderer trout than the Sunapee and lacks the clouded parr marks which are characteristic of the latter; it is also said to lack the white edges found on the breast, belly and anal fins of the Sunapee and other charrs. There have been a few caught in summer in deep water with the angle worm as bait, and they have been taken with the same lure while in schools upon their spawning beds; but then they give the impression that the bait annoys them and they bite to drive it away, an influence which seems to control many other fish when on their spawning beds; notably I have noticed it in the black bass, chub, and sunfish.

There is a recently discovered charr, the Lac de Marbre trout (*Salvelinus oquassa marstoni*), which is somewhat closely allied to the Oquassa trout, but reaches a greater size, and is readily distinguished from the blue-back by its coloration, its unspotted back being a dark brown with an iridescent bluish tint. This charr is found in Lac de Marbre, Ottawa County, Quebec, and in adjacent waters, and is said to rise freely to the fly and struggle strongly to escape capture.

The Great Lake trout (*Cristivomer namaycush*) can be distinguished from the other charrs by the presence of a raised crest behind the head of the bone called the vomer, on the roof of the mouth, the crest being armed with teeth.

The lake trout is the "namaycush" of the North, the "togue" or "tuladi" of Maine and New Brunswick (in the latter section it is sometimes called "lunge"); it is the "siscowet" or "siskawetz" of Lake Superior, and in the northern part of the lake it is generally known as the "Mackinaw trout." In the northern part of New York it is sometimes called "lake salmon," and the Maine Indians designate it by a name meaning "fresh-water cod." At Green Bay those having salmon-colored flesh are called "black trout," those with white flesh "lake trout." About Grand Traverse Bay the variety which is taken in shallow water, being long and slim, are called "reef trout," and when larger are known as "racers." Another

variety, short and chubby, are called "pot-bellies." At Grand Haven they are known as "shoal-water" and "deep-water trout," and "buckskins" is the name given them around Thunder Bay in Lake Huron.

In Canada many local names are applied to this fish, to wit: Tyrant of the lake, forked-tail trout, laker, red trout, gray trout, black lunge, silver lunge, racer lunge, black salmon, lake salmon and tuladi.

The distribution of this fish is widely extended, covering the Great Lake region and lakes of northern New York, New Hampshire and Maine, also those of Canada, and westward and northward to the headwaters of the Columbia and Frazer rivers, the streams of Vancouver Island and north to the Arctic Circle. It is very abundant in the larger waters, varying greatly in form and color, but never entering tidal waters. The lake trout is taken by the angler more frequently on trolling gear than by still fishing, although "baiting a buoy" is a favorite method of still-fishing for them in some localities.

The trolling tackle consists of a long No. 9 linen line, of which occasionally over three hundred feet is needed and used. Before using a new line it should be stretched to take the kinks out of it. Seth Green, who was the first angler to use the method, has described to us that the leader should be nine feet in length, of single gut, one size finer than that used for salmon. It is tied in two sections with a swivel three feet from the lower end, and another swivel on the gang of hooks. A six-ounce sinker is tied on the end of the line, and the leader is fastened on the line about four feet above the sinker. The hooks used are generally flatted O'Shawnessy No. 8, which have been found to admirably stand the strain of even the heaviest fish of this species.

Minnows are used as bait, and care should be taken to place the middle set of the gang of hooks three or four inches from the upper hook. In trolling in July, August or September, fish in fifty to eighty feet of water, and keep the bait about a foot from the bottom. You can make sure of this distance by allowing the sinker to touch the bottom occasionally. During May and June the lake trout is found near the surface, and no sinker is then required.

THE PROFESSOR'S SCAR.

By Paul Leland Haworth.

PROFESSOR HARDING is a man that often hears the wild world whisper, and cannot but obey the call. The pride of the house of Harding is his museum. It takes the place of wife and children with him; and into its upbuilding goes every cent of the income from his private fortune, as well as the greater part of his salary from the university.

Not that he purchases the specimens contained therein—no, indeed! Every one of them has been collected by the Professor himself. There by the entrance door stand two splendid lions that fell to his rifle in Somaliland. To the right is a mangy striped animal, once a celebrated man-eating tiger in Siam. Scattered about the room are African elephant tusks from the forests about Mount Kenia, leopards from Swaziland, grizzlies from the Rockies, pythons from India, polar bears from Spitzbergen, kangaroos from Queensland. On the walls antelope and bison and African buffalo heads face twelve pointer elk heads and moose heads with massive antlers. All these trophies and a great number of others—to say nothing of a remarkable collection of birds—are the reward of much hard labor and many an adventure by flood and field.

I had often before seen all the things, but in one corner of the room I noticed some new additions to the collection. There were three jaguars, two pumas and a tapir, besides ocelots, condors, monkeys, toucans, and a great variety of other South American animals and birds. It was evident the Professor had not returned empty-handed from his latest expedition, on which he had been absent almost a year.

While I was examining these the Professor came in, and after greeting me most heartily, began to show me the many rare specimens he had collected on this last trip, expressing regret that I had not accompanied him, sickness having prevented me from so doing. As he was pointing out a bullet-hole in the head of one of the pumas, I noticed on his left wrist a great scar, a part of which was hidden by his sleeve.

"How did you get that scar on your

wrist, Doctor?" I inquired. "I don't remember to have seen it before."

"Oh!" he laughed, "that's another little memento of the trip. I shall always have brought up to me, when I see that, the memory of one of the closest shaves I've had yet."

"Tell me about it, won't you?" I asked.

Now Dr. Harding, although a modest man, is not over modest. When he sees that a friend really wants to hear about one of his adventures he knows how to tell it effectively.

"If you really care to hear it, here goes," he replied. "But let's take it comfortably."

He led the way to an open alcove, the floor of which was covered with leopard rugs, and we sat down in easy-chairs, commanding a view of the whole of the splendid specimens that had fallen to his rifle.

"For several months," he began, "we had been wandering around in the wilderness in South America. Part of the time we floated about on the Madeira and Purus rivers and their tributaries, going as far down as the trackless tangle of the Selvas. The rest of the time we journeyed up and down through the Andes of Bolivia and southern Peru—at one time along the shores of Lake Titicaca, which is, I believe, the loftiest lake in the world, at another in tropical valleys where palms and sugar-cane and cocoa grow; then higher up the slopes through groves of evergreen oak and cinchona, and finally up among the shrubs and lichens and alpine plants, and the bare rocks and the eternal snow, where the air is so thin that our food would boil all night without cooking.

"About a week before the time I received this scar," he continued, "we met with an adventure which deprived us of the means of attempting an ascent of the Nevado de Sorata—something I had intended doing—besides causing us a great many hardships.

"While slowly picking our way among the terrible gorges of the Eastern Cordillera in the neighborhood of the Nevado de Illimani, a ledge gave way beneath our four pack mules, and they fell into a chasm. By this mischance

we lost our provisions, our scientific instruments, some very rare specimens, all the scientific data we had collected—in fact, almost everything except two rifles. Worst of all, we lost all our ammunition, except the ten cartridges in the magazines of the two rifles.

“Our three Indian guides were shiftless fellows, but game was abundant, and we made the best possible use of our ten cartridges—in a word, we got on so well that we expected to be able on the sixth day to reach a village on the shore of Lake Titicaca where we had left a part of our supplies. On the morning of that day Thompson and Landers, who, as you know, were my only white companions, succeeded, with our last two cartridges, in killing a couple of vicuñas, and we were thus amply provisioned.

“A little after noon a dense cloud began to gather around the snowy tops of distant Sorata, and from previous experience we knew that one of the sudden and violent tropical storms was at hand. We could do nothing, however, but hasten onward, looking the while for a place of shelter. By rare chance, at the top of a narrow deep ravine, we discovered a cave, and into it we crawled, happy at finding so conveniently a place of refuge.

“While we were waiting for the storm to pass (which turned out to be truly a most furious one), we noticed just inside the cave a large partly hewn stone, which had evidently been used in former times for blocking up the low and narrow entrance. Upon the floor near the mouth of the cave there also lay some fragments of rude pottery. These signs of previous occupancy led Landers to suggest that this cave might have served as a refuge for fugitives fleeing from Peru at the time of its conquest by Pizarro, and that they might have stowed a little of their treasure there and then have forgotten to come back after it.

“Something soon occurred, however, that turned our minds far away from the lost treasures of the Peruvians. Thompson, looking out of the cave during a lull in the storm, started back hastily, exclaiming, in surprise, that from up the narrow ravine two jaguars were coming leisurely toward us.

“We were in an awkward situation. The ravine, which had very steep walls, ended suddenly at the mouth of the

cave. The only avenue of escape was down the ravine; but that, of course, would take us straight into the mouths of the jaguars, and without ammunition, as we were, a fight would be hopeless.

“Fortunately a happy thought came to one of the guides, and he called upon us to help him block up the mouth of the cave with the stone. It was a difficult task, but, urged on by our fears, we succeeded in accomplishing it, just as the jaguars, who were now aware of our presence, attempted to enter.

“Their rage, when they discovered the entrance closed, was frightful. Above the stone there was a small opening; and through it we could see their great spotted bodies, their powerful limbs and claws, their fiery eyes, and their ugly yellow fangs.

“‘How are we ever to get out?’ I remember Landers asking, in a scared whisper, when the first shock of excitement had somewhat passed. It was certainly a hard question to answer. From all appearances the enemy intended to stay there till they got us. However, they had not got us yet, so we began to rack our brains for a plan to get rid of the brutes.

“I tell you it’s hard to imagine how much a man relies on firearms until he is without them. With a good rifle and plenty of cartridges I’m willing to take my chances anywhere, against anything, but take them away and I feel as helpless as a kitten. Just at that time I would have given twenty years’ salary for two cartridges in the magazine of my Winchester.

“But there was no use wishing for the impossible. There we were; something must be done, and pretty quick, too, for the beasts were beginning to tear at the earth and stones at one side of the blocked entrance, and were making considerable headway.

“I bethought myself of a plan that I had often read of being used in somewhat similar circumstances. I lashed my hunting-knife securely to the muzzle of my rifle with a piece of the hide of one of the vicuñas. Then I pushed the weapon partly out of the hole and watched for a chance at one of the animals. But a chance was some time in coming, for the jaguars were wary. At length the male gave me an opportunity, and I stabbed him in the shoulder. Because of the lowness of the entrance and the



"IT WAS A CRITICAL MOMENT FOR ME."

smallness of the opening above the stone, I was unable to use my improvised bayonet very effectively. Consequently, the thrust did little more than further enrage him. He seized hold of the muzzle of the gun, grinding it with his teeth and cutting his jaws on the knife. It required all the strength of three of us, to prevent him from tearing the weapon away. After this experience the brutes were even more careful to keep out of my reach.

"By this time the storm had ceased, and the sun once more shone forth. Peeping out through the aperture we could see, far away in the distance, towering into the arch of a most gorgeous rainbow, the snowy summit of Sorata, calm, silent, majestic. But we were not in a condition to enjoy the beauties of the scene while just outside watched the two jaguars.

"In the silence succeeding the noise of the storm we heard some peculiar snufflings from the darkness at the back of the cave. From what they proceeded we were unable to tell for a certainty, although I had my suspicions. Determined to solve the mystery, Thompson and I felt our way toward the sounds, which grew louder as we approached. After a bit we found, as I had expected we should, two small, entirely helpless animals about the size of cats. When they were brought to the light we saw that their eyes were not yet opened. They were kitten jaguars. The parents heard them and if they had been angry before, they were now perfectly frantic. They uttered the most terrible roars, and their glowing eyes seemed literally to shoot sparks of fire back into the darkness of the cave. Together they made a combined effort to force the stone from its place, and it required the united strength of the five of us to hold it against them. Discouraged by their failure and by the wounds I had again succeeded in inflicting with my bayonet, they withdrew a little way.

"After a time it occurred to us that if we could slip the kittens outside, the father and mother might perhaps be satisfied to leave us in peace. To do this, however, it would be necessary to move the stone somewhat.

"Before we were able to hit upon any scheme by which this could be done, one of us happened to glance out and discovered that the jaguars had disappeared.

"At first we white men were delighted over what we considered a good riddance. But the Indians took a different view of the matter. They said the jaguars had no doubt gone to another entrance to the cave. The thought so disquieted us that, in the greatest haste, we pushed aside the stone and scrambled out. Then we rolled the stone again into place, for it occurred to me that our enemies would thus be compelled to make another detour before they could pursue us.

"While part of us were employed placing the stone securely in position, I heard a loud squall from the cubs, and, turning around, saw Thompson, who, as you know, is of a thoughtless and rather revengeful nature, in the act of killing one of them. One I saw was already dead, and the knife was uplifted to slay the second. I did my best to stop him, but was too late.

"I now felt that all was lost, for I well knew that the parent jaguars would never desist until they had tracked the murderers of their cubs. For a moment I seriously considered re-entering the cave and trusting to their being unable to find another place of entrance. On seeing, however, that the guides and my two companions were already running down the ravine, I hastily struck out after them. Over roots and rocks and branches of trees dislodged by the storm we dashed, each one thinking, I suspect, mainly of his own safety, but all staying pretty close together.

"All our hopes rested upon being able to reach and cross a narrow and deep gorge that the Indians said was only a short distance away. By destroying the bridge over it, we hoped to be able to prevent the jaguars from following us.

"For perhaps twenty minutes we hastened on in a somewhat downward direction, over ground cut by innumerable gullies and fissures and covered with numbers of rocks and debris. We had almost begun to hope that we would not be followed, when from far behind us came a long-drawn roar. We redoubled our already desperate efforts and succeeded in reaching the edge of the gorge, just as our pursuers came in sight.

"But we were by no means safe. The bridge was one of those frail foot-bridges so common in that country, built of

canes and rope-like lianes and suspended in such a way as to sway at every step. This one was, moreover, old and rotten. At any other time we should have deemed it sheer madness for more than one to attempt to pass over at once; but now our only thought was to place the gorge between us and our pursuers.

"Thompson and myself were the last to cross. I recall clinging desperately to one of the vines that served for balustrades, while with the other I grasped my rifle. The bridge swayed frightfully. Below I caught dizzy glimpses of a mountain torrent dashing among jagged rocks. But somehow I got across; and, as my feet once more touched solid ground, one of the guides, who had been standing ready with uplifted hatchet, cut the fastenings by which the bridge was attached to the rocks.

"Just at that moment the jaguars came bounding to the brink. If we expected our pursuers would be stopped we were mistaken. The male jaguar, it is true, somewhat lamed by me at the cave, and perhaps less enraged over the death of the cubs, did hesitate. Not so the female. Without an instant's pause she sprang toward us. For one fearful second she hung over the depths, her mighty body flashing in the sunlight. Then she reached the opposite side, but only with her fore claws, and there she clung, endeavoring to obtain a footing.

"As quickly as possible I stepped forward and attempted to pierce her chest with the knife-bayonet, but she succeeded in pulling herself far enough up to seize my leg in her jaws. At the same instant one of her claws ripped open my arm. It was a critical moment for me. Landers grasped me around the waist and endeavored to haul me back from the brink, and at the same time one of the guides brought his hatchet down with such force upon the brute's head that she relaxed her hold upon my leg, struck the air wildly for a

moment with her fore paws, and fell backward.

"There still remained the danger that the other jaguar might attempt the leap, or that he might find a place where he could cross.

"But Pedro, who was a Pampas-bred Indian and the one that had just acted so courageously, now arose to the emergency. Cutting a strip six or eight feet in length from his leather poncho, he selected a couple of stones of perhaps two pounds in weight, and tied them to the ends of the strip of leather. Whirling this hastily manufactured bolas around his head several times, he discharged it at the jaguar. Fair and true the thong struck the animal on the forelegs, wrapping itself around and around them. Forgetful of all else in his efforts to free himself the jaguar rolled close to the chasm, and striking on a slight declivity, went over the brink.

"In the excitement that attended our deliverance I came near bleeding to death, for a large vein in my arm had been torn, and it was some time before my overwrought companions could close it properly. Even when that was accomplished, I doubt whether they would ever have got me out of the wilderness alive, so badly was I wounded, had we not that night fallen in with a pack-train from the silver mines. Next morning a litter was rigged up between two mules, and that evening we reached the village where our supplies were stored. There I recovered rapidly, and in about three weeks I was able to start for the coast."

The Professor ceased talking for a moment and pushed up his sleeve, disclosing the ragged scar, which reached from his elbow down to his wrist.

"Yes, it was a pretty close shave," he continued, reflectively; "and I was lucky to get off so cheaply. But"—and that roving look, which I had before noticed, came into his eyes—"that sort of thing is what makes life worth while to me."





Toadstool Park, Hot Creek.

THE GOOD BAD LANDS AND THE BAD BAD LANDS OF THE WILD WEST.

By Erwin Hinckley Barbour.

THE good Bad Lands could not be worse, nor could the bad chinery slipped a cog or two, and the fly wheel lost its balance, and things began to whirl for the moment, but we recovered sufficiently to tell the six-footer with the six-shooter, that if his lands were bad enough to be really good, and not so good that they were bad, it would be all right with our party. We never argue with a six-shooter.

Bad Lands be better. Paradoxical though it may appear, the bad Bad Lands are in truth the good Bad Lands, and the good Bad Lands are the bad Bad Lands. All of which goes to illustrate the remarkable flexibility of the mother tongue "as she is spoke" out West.

This phraseology is a trifle puzzling at first to the tenderfoot, consequently we stood with thoughts somewhat tangled, when the cowboy who met us with an "outfit" inquired whether we were going to the good Bad Lands or the bad Bad Lands. Our cerebral ma-

But, alackaday, what a night was that out on the open prairie! Sleeping—or rather trying soundly to sleep whilst learning to mould and shape and accommodate the bumps and humps of our anatomy to those of the ground on which our tarpaulins and blankets were spread! It is really a revelation the number of shoulder girdles and pelvic arches and trochanters and tuberosities a naturalist discovers in his first night in camp.

Have you ever lived the independent, free and easy life of the geologist?

Have you picked yourself up when you have fallen from a butte; have you gone hungry when there was nothing to eat; have you allowed the dust to line your larynx when there was nothing but alkali water to drink; have you combed sage brush out of your hair, and picked cactus thorns out of your flesh? Have you lain down to sleep at night on the smooth prairie with all the world around you and yours, and the stars and moon and milky way and sky your canopy?

Well, the starry canopy wasn't ours that night, for the clouds had staked out a prior claim there, and it began to rain where it had never rained before, as we could plainly tell from the parched and sun-baked condition of the ground. It didn't rain, it poured, and so did the wind and hail, if you will allow it.

Presently the proprietor of an adjoining ranch supply-house hove in sight with a lantern. He was dressed in a fish-brand slicker, impervious to rain and proof to hail; his boots were rubber, and his hat broad-brimmed, and the gleam of his lantern looked like an arc light in the darkness of that Aararat on which we were stranded.

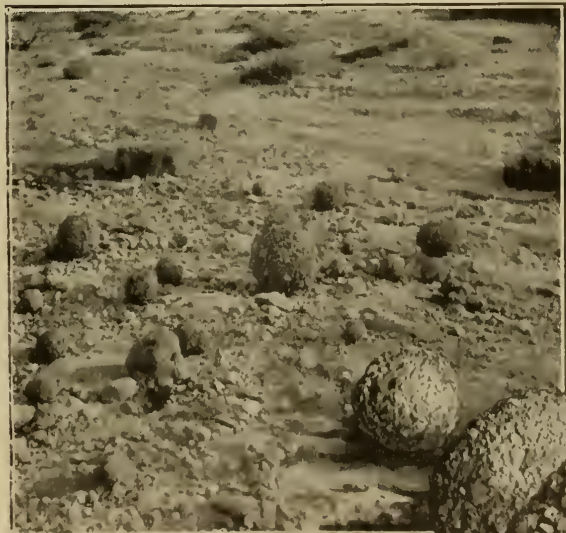
He remarked facetiously that we had brought quite a spell of weather with us, and seemed to think an expedition of scientists ought to know about coming in when it rained. He suggested that life in a tent had its advantages, at any rate the water was strained before it reached us; and with his kind permission we spent the remainder of the night sleeping peacefully on the soft side of his plank floor.

But do not too hastily infer from all this that our days in the Bad Lands were spent in an unbroken round of levity and mirth. There was play, it is true, but also work. Why! we remember vividly having worked all one morning to start our bronchos, and then we put in the rest of the day trying to stop them. No one has as yet "savied" the broncho. You may understand the ancestral five-toed horse of the Focene; you may know the osteology of the three-toed horse of the Bad Lands Miocene; you may be conversant with the embryology and phylogeny of the one-toed equine of the Pliocene; in short, you may compass the whole history and philosophy of the Polydactyl horse,

but the modern broncho is past finding out.

Work him to death in summer and starve him to death in winter, ride him all day and picket him all night on the prairies, and he will carry you up-hill or down most graciously. But just feed and caress him, and he will not budge an inch on a down-hill pull. Then it is that cowboys spring up around you in a manner so phenomenal and inexplicable as to furnish the most convincing proof of the theory of spontaneous generation. Other accidents may befall you, and you may perish solitarily and alone on the plain, but not so if your horse balks, for cowboys are generated out of the hardpan and alkali dust from all quarters around, to advise and succor you.

The first arrival will tell you that you must change the current of the broncho's thoughts. He will patiently loosen all the buckles, take off his harness, re-harness him, walk him around the wagon, back him up to his place at the tongue, and hitch him, just as if nothing had happened. But lay not the flattering unction to your soul that the broncho has forgotten himself. Not he! He sets back as before and brings the wheel horses and leaders to a dead standstill. The next cowboy, too, informs you that the thing to do is to change the current of his thoughts in some way, say by pouring sand, shelled corn, or shot into his ear. Now no well-regulated broncho with any sort of natural ancestral pride is going to hear shot hail down on his tender tympanic membrane without registering a mighty kick. If you escape his hind feet he will get you with his fore feet, and



Clay Concretions.

with all four feet before he is done, but further than that he doesn't move. The only things that have moved in the meantime are the cowboy, who poured the shot in the poor beast's ear, and the sun, which has climbed a few degrees higher.

The next cowboy prescribed the same change of ideas, and put a handful of

dirt in the creature's mouth, which he rolled like a sweet morsel under his tongue, and then champed his bits and spit mud over his harness, and everything and everybody within reach. He could do this, you see, without moving. How he did throw mud! It would have aroused the despairing admiration of a campaign paper to see how deftly it was done. Here was a resource

awaiting development, and yet there was not even a country editor to utilize this one horse-power mud-slinger against a hated rival. But still the "bronch" withstood, unmoved by oaths or entreaties, while the glorious orb of day was bowling rapidly along toward the zenith.

But in all justice to our bronchos be it said that never once did they flinch in

a dangerous place; no matter whether climbing steep and precipitous hills, or fording treacherous streams, or scaling slippery walls to escape a torrent, they could be depended upon. The inexplicable part of the whole thing was that their innate stubbornness cropped out most when they were freshest, best fed, and were on the easiest grade. Before

the season closed these very balkers had taken us to sights and scenes that men might well cross continents to see.

Our first hour revealed to us more natural phenomena and physiographic features than a textbook could describe in whole chapters: mountains, valleys, table lands, fossil beds, blow-outs, draws, buffalo wallows, and game trails.

But the trails of our stately game are

forever abandoned. The work which nature required centuries to do, is undone in a decade. It stirs one's very soul, if he has any, to consider the wanton murder of the herds of magnificent antelope, deer, elk and bison, which once flourished. The very hillsides are terraced as the trails approach the narrow cañons down which the game went



Titanic Pillars of Marl.

in passing from the lofty Pine Ridge table-lands to the basin 1,200 or 1,500 feet below. As the trails converged but four or five could walk abreast in nar-



Blow-out and Cove.

row defiles, and here the sand-rock over which they walked is furrowed in parallel ditches deep as bison could walk. The great game trails and buffalo wallows, though still distinct, like a deserted path have passed forever out of use and are grown over.

Taking advantage of the fact that such sluggish, heavy animals as bison always selected the best and easiest grade, we used to follow their old trails with our horses in going across the prairie. The old wallows vary from an acre in size down to those only large enough for an individual.

Immediately adjoining the abandoned buffalo wallows are very similar depressions, save that they are of magnificent proportions, being broad and deep, and not infrequently several acres in extent. These are blow-outs. Could you face the wind that unobstructed sweeps the Pine Ridge table-lands you would ask no questions as to how these giant holes were made. This mighty sand-blast has produced too some of the most fantastically sculptured and engraved rocks that ever adorned a landscape. In the centre of the blow-out, like a cup in a titanic saucer, there often stands a great core of rock so hard that it resists the tooth of time, and even the western winds. The winds and rains often sculpture rocks finely, and they stand bolt upright and solitary, their only companions being the eagles that

build in seclusion and safety on their summits, the mud-daubing swallows which encrust their sides with clay nests, and the uneasy rock wrens which dodge in and out through their cracks and crannies. But more interesting to us than these were the strange fossils projecting from their sides. They looked precisely like the splendid pillars and pilasters of some old ruins.

Occasionally a splendid column has toppled over and lies broken and fast falling into decay. There were whole cities of these ruins, and nothing more puzzling and anomalous, nor more productive of speculation could be found. Could anything organic, be it plant or animal, lay the lines of its complex abode with such nicety and precision?

The ranchmen who saw them first called them devil's corkscrews, twistlers and spirals. Since then everything from a "petrified well auger" to the prehistoric evidence of a meeting of Iowa prohibitionists has been dubbed in jest the devil's corkscrew.

The microscope, which can look into their very tissue, shows that they are plainly of vegetable origin. Not a plant of the higher types; but an alga or sea-weed whose thin, thread-like fibers, bunched and tangled themselves together in a spiral form.

These early plants were of aquatic habits, and they were submerged in the muddy waters of an ancient lake. As the lake filled with mud and sediment as all lakes are doing, they were inclosed and fossilized, and the sediment was changed into rock.



Crooked Cottonwoods.

From our tent door we could look down upon the Hat Creek basin or the "bad Bad Lands" of Nebraska, some 1,200 or 1,500 feet below us. Objects at great distances were sharp and clearly defined, and one could not judge whether a particular butte was within walking distance, or miles away.

In passing from the Pine Ridge tablelands, which for several weeks had been our home and treasure-house, we drove through the most beautiful cañon that ever had saddled upon it so inelegant a name as it now bears—and must bear for all time perchance—for no attempt as yet has changed the inexorable de-

which has strayed from its natural habitat in Washington and Oregon as far east as this, grows in luxuriance. Immense cottonwoods and ash and maples line the banks of the stream which winds through the cañon. To the left rises the beautiful spire of Church butte, and other buttes flank it on the right. There is romance and art and poetry in every line of this cañon, but, alas! that unromantic name—Sowbelly Cañon. They have tried to compromise by calling it Bacon Cañon, but this is altogether too tame in this land of florid language, where bacon is dubbed sowbelly, where eggs are called

hen-fruit, where the butter is surnamed the goat, milk is called cow-sap, sugar the sand-bag and sorghum the dope.

Such is the legal designation of this attractive spot; it has been stamped in history, and fate alone can change the decree. But let not the name turn you against it or away from it, for it is a beautiful cañon, and when you emerge from its grateful shade and leave its brooks and brambles behind, you step unwarned into that lifeless, semi-arid basin, the Bad Lands. Probably there is no land stranger nor more totally unlike anything conceived of than these Bad Lands, which so many hear of but so few see. The region until recently has been somewhat inaccessible to travelers. Then, too, the little water that is found there is more or less alkaline, and often unfit or even dangerous to drink; and the reflection of light from the white clays is often trying or even unbearable to the unac-



Crag and Pinnacles of the Protoceras Sand-rock.

cree that the wag who named it first has the right of priority. The walls are lofty, rugged, and nearly perpendicular, and wherever there is a footing that splendid pine—the *Pinus ponderosa*—

customed eye. As to the excessive heat it may be said that there is unimpeachable authority for the somewhat exaggerated and misleading assertion that the Bad Lands are but a flimsy

roofing or crust, interposed betwixt the stifling and superheated air above and the regions infernal below.

One paleontologist of national repute, speaking feelingly on this point, says

instead of by rivulets and rills, it would give a very fair conception of the Bad Lands, about which cluster so much of scientific interest and wonder. The Bad Lands are simply certain very ir-



An Old-time Buffalo Wallow.

that the temperature in the Bad Lands is 120 degrees in the shade, and no shade.

His test for good water is as ingenious as that of the old New England divining-rod. Inasmuch as there are no springs or streams, and water for drinking or cooking is drawn chiefly from standing pools, he tests them by standing a stick in the water. If the stick falls over, it is water fit for use; if it stands, the water is condemned for drinking, but may be used for cooking and making camp coffee. Some such water has been standing in bottles in our laboratory for twelve months, and has not settled, and never will. However, by digging wells in the dry beds of streams, one can often get cool, clear water.

Let your mental picture of the region be wild and weird, but above all things, parched and sun-cracked.

Good illustrations portray the peculiarities of these lands, where the pen of the readiest writer may fail. However, a very fair general idea of them may be obtained by observing the clay thrown up fresh from the cellar of some building. Each rainstorm cuts and gullies the sides of the clay mounds a little deeper; the whole is bare, burned, and devoid of grass.

If these miniature mounds were mountains ribbed by gorges and cañons,

regular patches, occurring lifeless and bare in the midst of fine, green prairies. Their barren nature is due to the excessive wash to which they are subjected. Rains pour from the steep, bare mountains of clay as from a roof, and in their fury they cut and wear away the Bad Lands, and transport the clays and sands to the Mississippi. In evidence thereof, the waters of the Cheyenne and Missouri are always turbid and yellow.

The wear and tear by erosion is so excessive here that nothing gets a footing, and it is no reflection whatever on the quality of the soil that these are known as Bad Lands. In fact, the soil, when stable, is fertile, and some of the finest grazing lands to be found anywhere are in these same Bad Lands.

Farms, too, are found which respond to cultivation readily, and with liberal returns. The name Bad Lands is a misnomer. As originally applied, it meant bad to drive over; they are simply impassable. You may drive for hours over prairies covered like a lawn with that richest of grasses, the short buffalo grass, and then come upon miles of bare and impassable bad lands. So the



better lands and the worse alternate, the one being but the other under more stable conditions.

There in the scattered relics of a former age one may read some of the unwritten lines of that mysterious, unrecorded past, which must at times engage the serious thoughts and speculations of mankind. Where history is lost and shrouded in the obscurity of the past, these lines begin; and those causes and effects which shaped a destiny prior to that of man, are preserved in chapters that are still legible.

To the naturalist all truths are sacred alike, and in the Bad Lands truths lie scattered at every step where those who run may read. When you find the remains of the rhinoceros, camel, tapir, tiger, monkey, crocodile, and other tropical animals, you know for a certainty that that very region was formerly tropical.

Every layer there has something inscribed upon it, and no region is more perfectly stratified than this. Layers of variously colored clays and sands alternate with one another, producing a most harmonious and beautiful effect. The colors range through brilliant and contrasting shades, to the most delicate

and harmonious tints. There are the purples blending into lilac and lavender, and reds, and greens, and yellows; the last being the prevailing color of the whole Bad Lands. It is just after a storm, while the bare clays are still damp, that the prismatic display is finest.

The stratification is practically horizontal, and one can trace for miles a given layer and search for the fossils which are known to be peculiar to it. Occasionally in the clay or marl, which are the prevailing deposits, one encounters a narrow bed of coarse water-worn pebbles, gravel and sand, that marks as plainly as a signboard could, the direction of the current which carried into the ancient tertiary lake the clays and sands which slowly filled and obliterated it. Down the current floated also the carcasses of the strange mammals which frequented its borders, and their bones were buried in the lake bed along with the sediment carried thither; the spot which gave them food and drink became their tomb.

At first the neighboring water-shed led toward the lake, but afterward away from it. Then it was that the stream began to cut and carry off the massive piles. Throughout the length and breadth of this lake, which covered parts of the great States of Dakota, Nebraska, Wyoming and Colorado, about 600 to 800 feet of sediment were deposited before the tooth of time began to gnaw at it.

Clays and marls and sandstones weather out into forms peculiar to each. The castellated structures are very perfectly developed in clays, for wherever there are thin rocky layers in the clay, they play exactly the part of the water table in architecture. The water dripping over the edge and falling in vertical lines, cuts and flutes their walls as true as the plumb line itself. When clay is overlaid by sand-rock, then occur those tottlish table rocks and chimneys, which rise high in the air, and straight as great smoke-stacks; capped above with masses of rock in such unstable equilibrium that one admires, but holds his breath.

One chimney rock which rose like a slender pole out of the great pyramidal butte, bore on its summit, far out of harm's way, the nest and eggs of an eagle; at its base we found the petrified eggs of a turtle. Here, then, were two



Mother Grundy.

mothers separated in time by a period of not less than twenty-five or thirty thousand years.

Owing to a concretionary structure in sand-rock one often finds magnificent

crooked and distorted, may be seen. Close at hand are those inaccessible table-lands, miles in extent, which were the scene of the Wounded Knee massacre. To the left is Sheep Mountain,



Abandoned Game Trails.

toadstool parks. Water in cutting through rocks will naturally follow lines of weakness, and so wash out the great concretionary toadstools, leaving them standing on sculptured pedestals. The round or oval tops have so weathered out as to show distinctly every line of lamination. These toadstool parks, together with typical buttes and characteristic bad lands, may be seen two miles northwest of Adelia, on the line of the Burlington and Missouri Railroad.

But these are the little Bad Lands, or, as they are commonly called, the bad Bad Lands of Nebraska. It is in the good Bad Lands of South Dakota that the lands are the worst, the hills highest, the gorges deepest, the chimneys the tallest, the architecture the finest. There between the White and Cheyenne Rivers you can look as far as the eye will reach on unbroken bad lands. There mountains of clay, and buttes of the most fantastic designs rise one above the other, without a blade of grass, or a growing thing in sight. Skirting the Bad Lands and in the valleys of dry streams, grass grows luxuriantly, and an occasional cottonwood,

the backbone of the White River bad lands, where a small herd of fifteen or twenty big horns—which gave it its name—still survive.

In this land of magnificent distances one expects and finds things on a broad and generous plan. He finds it so here, even to the storms that rage. On the hour of our arrival we were initiated into the mysteries of the big Bad Lands at Bone Camp, by a hail storm of such proportions that our guide called the introduction a regular "country knock-down." The cloud was inoffensive looking, it was true, still it had that V-shape, and those who have eyes trained for tornadoes are wary in a region where there is not a properly constructed cyclone hole in sight. It is just as well that we drove the stakes deeper, and tightened the guy ropes, for even then it took seven of us to hold the tent against the wind, and rain and hail. The violence of the storm seemed irresistible at times. Hailstones as large as lemons pelted our tent incessantly. The dry draw in front of us became a raging river, and down its current flowed streams of hail frozen into cakes, which



A Natural Bridge.

looked precisely like floating ice in a freshet. Twelve hours later we found whole banks of hailstones in sheltered ravines, which, by actual measurement, were still larger than English walnuts.

Of course this was an "equinoctial storm," as anyone could plainly see, even though it did occur in the summer solstice. It furnished us with some amusing and interesting subjects for the cameras, with which our party was as carefully provided as with picks, chisels, and hammers.

At every turn there is a changing scene of beauty and novelty. There are broad, magnificent expanses of bad lands for large plates, and beautiful bits of detail for the hand cameras. From our entrance and journey among the crooked cottonwoods of Correll Draw, to our exit fording the Cheyenne River, we found subjects as instructive as beautiful. They were of all the deeper interest to us from the fact that they were absolutely and entirely new. In spite of all the difficulties which attend photography in this region, we were rewarded by a unique set of several hundred photographs. At this altitude and in air so pure, light is exceedingly actinic. There is no green verdure to absorb the sun's rays, hence they fall upon buff or nearly

white clays, and are reflected back with full intensity. The shadows, therefore, which ordinarily would be expected, are obliterated by reflection, and in the plate the most serrated and rugged bad lands are flat. One might as well press the button at direct sunlight. But wait for lengthening shadows of sunset, and majestic buttes of marl rise mountain high. Then it is that the characteristic forms of the Titanotherium beds, Oreodon beds, Metamynodon and Protoceras sandstone stand out in full relief. Then it is that the naturalist sees the characteristic nodular layer of the Oreodon beds, the pillars, portals, and crags of the Titanotherium, and the rugged ledges and towering chimneys of the Metamynodon and Protoceras sandstones.

Swallow Crag, which is the tombstone reared over some of our richest "finds," is the home of countless swallows. Under the secure eaves of capping sandstone, the nests are crowded together in thousands, side by side like bubbles of clay. Yet the owners never miss their own door, and they never fail to feed in turn each gaping mouth of their own brood, and when an unwelcome hawk appears they swarm around it like an angry hive. Before the sun is up, and long after it is down, and during all hours of the day, they sweep around in a circle that is endless, and yet their broods devour the meals they bring, and clamor for more.

The little striped squirrels, scarcely larger than a common mouse, gray as the banks in which they live, were eating at the prairie sunflower heads at every turn, around the border of that barren waste. But when next we revisited the spot scarcely a survivor remained, for the drought had killed the beds of wild sunflowers. These little squirrels perished in numbers of which, I, for one, can form no conception.

The collector in the Bad Lands, whether on foot or in the saddle, goes in and out among these ruins searching for what he wants. If some particular animal is sought, then he confines his attention solely to that layer in which it is known to occur. A walk of sufficient distance along that layer rewards the hunter with the exact object sought. Perhaps it is enclosed in a nodule of rock; if so, this is the best packing material known, and it is shipped whole.



If found in sand rock the chances are that it will be finely preserved, for sand binds together, and the fossils are not broken by that constant displacement and readjustment which rocks are undergoing. A large slab of the rock containing the fossil is cut out and shipped bodily, and the museum preparateur cuts the fossils out with pointed chisels, much as a stone-cutter would dress a stone.

But if found in clay the chances are that the fossils are checked and fissured in every direction, because, on account of the plasticity, the clay yields readily to every stress. Then, before they are removed from the bank, they must be swaddled and pasted over with paper, cloth and burlap. They are picked up as tenderly and handled as carefully as infants. Native lumber is brought from the nearest town, distant thirty-five or forty miles or more, and boxes are made to suit the size and weight of the specimens to be shipped. Then they are carted to the nearest station, and these old-timers leave forever the scenes of their birth, death, and burial.

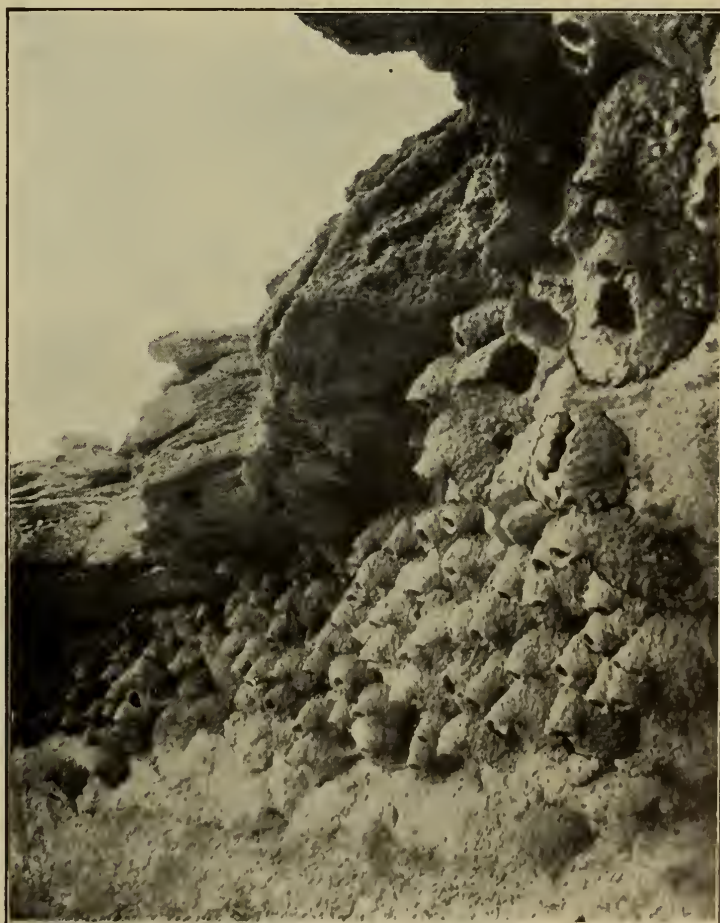
According to common parlance the heat and light of this region are insupportable and the Bad Lands are within a mile of that historic old bad place. Whenever people tell you of incalculable heights, unfathomable depths, and boundless space and extremes of heat and cold, it is a very wholesome thing to get out your measuring-rod, and make a few measurements for yourself. By so doing we were enabled to discount reported heights and distances by nearly thirty per cent., and temperature still more. During one month, ending July 20th, we found the average temperature for morning, noon, and night, to be about 55°, 87°, and 64°, respectively; the lowest morning temperature being 48°, the highest 68°;

the lowest midday heat being 68°, the highest 95°; the lowest evening temperature 48°, the highest 78°. Very moderate figures indeed.

But when it comes to distance, the mile as a measure of length has no meaning to the cowboy of this region. Ask one of them, if you chance to meet one, which you will not, how far it is to War Bonnet or Squaw Creek or to Lame Johnny Creek, and he will tell you it is just over yonder, which experience has taught us means thirty or forty New England miles.

The air in high and dry altitudes is pure and free from germs, so that our camp butter kept sweet for days, and meat exposed to the sun simply dried up and turned black without becoming offensive, unless in bulk.

Pleasure parties visit the Bad Lands from many quarters, and almost annually large parties from Yale, Harvard, Princeton, Columbia, the State University of Nebraska and other colleges, visit the section. It matters not whither your tastes and inclinations may lead you, there is a mysterious fascination that holds a spell over everyone who enters these wonderlands.



Swallow Crag and Nests.



THE CHILDREN CALL IT BLOODROOT,
AND WONDER WHY IT BLEEDS.

A LEGEND OF THE BLOODROOT.

By Ernest Seton-Thompson.

I HEARD a song in the timberland;
It rang in the early morn.
Of a life and a love and a home at hand
It sang in the gladness of morning.
And softly she answered the voice of her love,
When the dew was ablaze in the morning,
Till the noise of a gunner was heard in their grove,
And the wail of her anguish was borne to her love,
Where he sang in the light of the morning.

Oh! fly where she fell in the moosewood brake,
For sore is she wounded and dazing,
And bide by her side for your passion's sake;
Now darkly the bright eyes are glazing.
Oh! bury her deep in the life-giving Earth,
For the gloom of the night is nearing,
And plead to the Mother of life and birth,
With the song of your sorrowful searing.

Hid was she in the fallen leaves,
And brighter their brown was growing,
Where, dashed from her gentle bruised breast,
The stream of her life was flowing.
And long in the noonday twilight place,
In the darkness and sadness intoning,
The Singer was heard in his plaintive grace,
In the song of his sorrow and moaning.
And burst was the breast of the Mother of life,
At the grave by the timberland awning;
And there came, not the lost, but a memory forth
And the east was all streaked with the dawning.

This simple white token sent back to the day,
Could the Mother be deaf to his pleading?
And Bloodroot our children all call it, they say,
And wonder, when bruised, at its bleeding.

ATHLETIC DEVELOPMENT IN FRANCE.

By Caspar Whitney.

ALTHOUGH the athletic movement in France, as in Germany, owes its impetus to the persistent and arduous efforts of a few patiently enthusiastic sportsmen, rather than to spontaneous action from within, yet there is this difference: that the Frenchman has encountered more obstacles than the German, and, at the time my observations were made—about a year ago—he had made greater progress. This is due, it seemed to me on the ground, not that the stirring qualities of vigorous play attract the Frenchman more than the German, but because the Frenchman is quicker to take up a new toy and keener to be in the vogue. The Frenchman is not a sport-lover as we—Americans and English—understand it, neither is the German, but the former is more impressionable and responds more quickly to whatsoever makes for his enjoyment. He takes his pleasures gayly enough, and goes so far in sport as pleasure and fashion impel. He affects to make a pleasure of his sport, but deep in his heart I believe he really curses the Anglo-Saxon sporting wavelet which has swept over his country in recent years.

Yet athletics, using the term in its wide sense, have made progress both in standard of excellence and in popularity, and despite severe handicaps—the chief of which were national indisposition to vigorous out-of-door play, and national prejudice against anything not of French origin. Whatever there has been in France of sport indigenous, has owed its life either to fashion—as, for example, stag-hunting—or to the national gambling instinct, as in the case of horse-racing.

The real Frenchman has not the Anglo-Saxon appreciation of sport for its own sake. The boys of France have never had vigorous play until the start of the present athletic movement. They have never indulged in sports like the boys of England and America. To this day there is no general encouragement of games at the schools—only a few have gymnasias. There is no intercollegiate athletic competition. There are no sports in the army. No encouragement to healthful

outdoor exercises comes from schoolmasters—Père Didon honorably excepted—or from university faculties.

Indeed, the influence of school and university officials and of the French government itself has been exerted in quite the opposite direction.

Before the present athletic movement, which set in with the formation of the Racing Club in 1882, the sports of France included—besides several varieties of tennis—hunting, horse-racing, rowing, yachting, fencing, and gymnastics; but with the exception of horse-racing and hunting, organization was lacking and indulgence desultory; indeed, with the exception of horse-racing all languished. Thus the situation confronting the Union des Sociétés Françaises de Sports Athlétiques on its organization in 1887 was forbidding.

The Union has had, in truth, abundant difficulty, overcoming national disposition, opposition of parents, of schoolmasters, and of university faculties; therefore, it is entitled to the more credit for what it has accomplished. By persistent effort it has succeeded within three to four years in introducing some interscholastic competition. It has aroused interest in track athletics and football, and made an effort, and with some little success, to purify rowing. It has had, in addition, to contend with the practical difficulty of making athletics self-supporting, as attendance at games is so small that gate receipts are inconsiderable; for example, the championship football match attracts only 2,000 spectators, while the attendance at track games is very much smaller—the interest in these events being confined chiefly to the schools. The lack of a half holiday on Saturday has also proved a handicap, not only in operating against the development of athletes, but in lessening attendance at the sports.

Furthermore, the Union has had also to struggle with imperfect knowledge of training, improper standards, and ignorant officials. They are still learning, and there is yet ample need of it, for track athletics are not yet nearly so well understood in France as in England or America; comment which

appeals with especial force to training systems.

With all these handicaps, past and present, taken into consideration, the progress made must be declared commendable.

When the Union was established there was no intelligent appreciation of amateur status, and only four clubs were in existence: the Racing Club, founded in '82; Stade Français, founded in '83; the Tennis Club of Ile de Puteaux, founded in '86, and a Water Sports Club, founded in '80. Now there are

very few of them have houses, those of the Racing Club and the Ile de Puteaux being the only ones of importance.

The membership roll of the Union includes track athletics, lawn tennis, football, bicycling, what trifling play there is in lacrosse, cricket, baseball, and hockey, and indeed all sport except yachting, which has an association of its own, and horse-racing, for which there are three associations, covering flat racing for gentlemen riders and professionals, and steeple-chasing.

The Racing Club has a membership



The Promenade at Longchamps.

256 clubs, members of the Union, 146 in Paris and 110 in the Provinces; and as a rule an amateur basis is preserved.

In fact, the club athletics of the Union are in a much more healthful condition—much cleaner, to be perfectly frank—than is the case under the Athletic Union in England, where there have been generations of experience. If the French Union had accomplished nothing more, it is to be heartily congratulated for having maintained, so far as it has gone, an ethical standard worthy of respect.

Most of the clubs have grounds, but

of about 600; the Ile de Puteaux, 800; the Stade Français, 280; there are five others having over 200 members, while the remaining clubs will each average perhaps about fifty members.

A small stir came immediately after the organization of the Union in '87, and a few clubs were established between '87 and '90, but the real athletic movement did not actually begin until about '92, and from '93 to '97 the great majority of clubs were organized.

France's impression on the records of the track athletic world can hardly be called indelible. Nor can we view as

remarkable either the general average quality of French athletes, or the separated results of individual endeavor—even taking into consideration the prevalence of grass tracks. It will be seen from the accompanying table of present French amateur records that their performances are at best but little above mediocrity, and in some instances even below it. These figures, in truth, would not compare favorably with American interscholastic records :

100 metres	(109.39 yds.)	10	9-10	sec.
400 "	(437.44 "	50	3-5	sec.
800 "	(874.88 "	2	min.	1 sec.
1 mile	.....	4	"	37 2-5 sec.
3 miles	.....	15	"	17 1-5 "
17 kil., 122 m.	(10 miles,			
	1,126 yds.)	.....	1	hour.
110 metre hurdles	(120.3 yds.)	17	sec.	
16-lb. shot	.....	35	ft.	2 in.
Broad jump	.....	20	"	7 "
High jump	.....	5	"	7 3-8 in.
Pole vault	.....	9	"	8 1/2 in.
Throwing discus	.....	107	"	3/4 in.

The oldest game in France—indeed, the only one native to the country—is court tennis, which while never popular, so-called, has had always enough devotees to keep it alive ; yet Paris, the Frenchman's universe, at present is reduced to two courts—the famous ones in the Jardin des Tuileries.

The ancient games of France included differing forms of tennis, and next to the court variety perhaps the most famous is *longue paume*—using an open-air court something like lawn tennis—which is played to this day in the beautiful Luxembourg Gardens, in Paris, where a club organized in 1853 still holds regular meetings. *Pelotte* and *paume*, two other old national games, are to be found very generally played throughout the provinces.

Very properly it happens, therefore, that among modern games earliest to achieve popularity in France was lawn tennis, which began first to attract marked attention in 1884, and has remained ever since one of the most successful, owing to its endorsement by fashion, and to its exceptionally beautiful home on the *Ile de Puteaux*, which is an island in the Seine, with a number of courts and very beautiful grounds. Another is the Tennis Club of Paris, having in addition to earth courts a large building with two courts for indoor play. At Cannes, of course, as everyone knows, are, perhaps, the most

beautiful courts in the world, with tournaments every winter that are chief among the fashionable events of the season.

Football has shown more real activity than any other of the sports, and its progress in ten years is really notable. With no support whatever, and with schoolmasters and university faculties and parents all opposing it, yet the blood-stirring qualities of the game triumphed as they did years and years ago in England; as later they did in America.

The Association game is the popular one in Paris, where there are thirty-seven clubs to seven of Rugby; whereas in the provinces Rugby predominates to such an extent that there are only four of Association. In 1893 occurred the first football game between the English and French, and the beginning of international competition, which started the football boom in France. From that time the two countries have had annual meetings, with the English always victorious. The French game has improved, but its present best standard is about equal to the English second-class.

Rowing is one of the oldest sports of France, but until the organization of the Union, the word "amateur" had no significance whatever to oarsmen. The Union has made great efforts to purify the sport, but met with little success. Rowing in France to-day is neither prosperous nor clean, oarsmen having always strenuously objected to giving up contesting for money prizes. Though two or three excellent clubs have joined the Union, there are from forty-eight to fifty out-law organizations, which exist though they do not thrive, and row with a shorter slide and more arm work than we consider desirable. Their boats are excellent. The one bright spot in French rowing history is a defeat in 1892, on the Seine, of a London club eight.

Bicycle racing was killed in France by masquerading professionals just as it was here, but bicycling for pleasure has always had great vogue, which the magnificent roads have encouraged and made enjoyable beyond any other country in the world. So intimate a part of daily life has the bicycle become, indeed, as to make its classification as sport somewhat trivial. It is in truth almost an integral part of economic as well as of healthful living.

Stag hunting, the royal and renowned old sport of France, has become very difficult to get and quite expensive owing to republican land systems and the increasing number of small estates. Such sport as obtains is had chiefly on preserved lands, and an estimation of \$100 is given for every stag killed. There is some fox hunting also.

No playing ground more beautiful than the Polo Field in Paris is anywhere to be found, but, though games are regularly scheduled in Paris and at Pau, there is really little, if any, polo development among Frenchmen. A great deal of the polo activity is due to the winter residence of Americans and Englishmen. The Frenchman apparently does not take to it. Perhaps this is because, as a rule, he does not ride well. None the less it is passing strange that the officers of the famous French caval-

fore the flat racing at Longchamps, with its events for gentlemen riders (who are usually cavalry officers), and the steeplechasing at Auteuil attract spectators in great numbers.

The coaching interest has declined much from what it was a few years ago, and so, too, has tandem driving, the pupils of the famous teachers being nowadays mostly Americans. Even the spring Horse Show has suffered, owing to the loss of amateur exhibitors, and to the fact that dealers absorb most of the classes. Herein lies a warning to the National Association of America.

Golf has, of course, made its way in France as in every other civilized country. There are several flourishing clubs, some of them being supported largely by visiting and resident foreigners.



The grass track and home of the Racing Club.

ry, who do ride well, do not take up the game.

Horse-racing in France is to the *haut monde* in summer what the opera is to them in the winter. The excitement of a quick race, with its intervals for promenade and gossip, fits the French volatile temperament to a nicety; there-

In yachting the social appears to rise superior to the sporting element, yet there are a great many private owners and some fairly good sport on occasions.

It is to be remarked that, while France has exceptional opportunities for all sports, distinction has as yet been attained in none.

BICYCLE SIDE-PATH BUILDING IN 1900.

By Robert Bruce.

THE construction and maintenance of special wheelways for the use of bicycles and tricycles has already entered a period of extraordinary development throughout the greater part of the United States; and the rapidity with which this quiet movement has coined itself into visible results is an encouraging sign of the times.

The movement owed its origin and its early growth to individual effort, but it has outgrown that period, and the year 1900 will most likely mark the entire disappearance of the independence, and oftentimes isolation, of restricted organizations, each working territory without regard to, or uniformity in aim with, its neighbor.

The formation of local leagues was the first advance toward federation; and to these spontaneous bodies is due most of the results already achieved, notwithstanding that their executive committees perpetuated on a large scale the fault of individual action, and largely ignored the existence and scope and work of neighboring leagues.

Consequently, every league had its Rome, and to that point all paths were made to lead—from it, all must head. The favored locality might be a large city or a small town, and on or off the main line of travel in its section. In either case, to use to advantage such a series of wheelways, one's start and finish must need be at one and the same place—the Rome of local routes. The scheme was the joy of the home riders, but the despair of the tourist.

For instance, over one hundred and twenty-five miles of excellent wheelways, perhaps the best in the world, gridiron the territory about Rochester, N. Y., but no attempt has yet been made to link that city with Syracuse. Utica is the centre of the next best system in the Empire State, but it is still unconnected with Little Falls, twenty-two miles down the Mohawk Valley, and on the main thoroughfare to New England and New York.

Or to take another instance, there is a very favorable route from the Albany Gateway to Buffalo, a perfectly natural and continuous wheelway from the Hudson River to Lake Erie; but its usefulness

to tourists has been brought to naught through lack of co-operation between the sidepath commissioners of Albany, Schenectady, Montgomery, Herkimer, Oneida, Madison, Onondaga, Cayuga, Wayne, Monroe, Genesee and Erie Counties. In other parts of the country similar conditions prevail, but nowhere else so palpably.

As an example of harmonious action and its results I may mention the Lake Shore route, in the extreme western end of New York, and for about one hundred miles in northern Ohio, for it affords the best example of work carried out for the convenience of through tourists. No such conflicting systems as those found farther east are in that stretch of country. In fact, natural topography is more responsible than conscious effort for the fine riding to be had there. But, nevertheless, the pathmakers of that section gave first place to through routes, a policy which ought everywhere to prevail.

The sidepath convention held at Rochester, N. Y., last year was the first of its kind in the world; and a practical effort was then made, in the interests of long-distance path-building, to unify the plans of the many leagues represented, and the New York State Division L. A. W. has accepted the task of laying out a wheelway from Manhattan to Buffalo. The route chosen has more regard to varied and picturesque scenery than to easy travel. It is proposed to extend up the Hudson to a point opposite Kingston, or Rondout, cross the river (by ferry), thence through the Catskills to the Susquehanna Valley, to Binghamton, Elmira, Corning, Dansville, etc., to Lake Erie. Meanwhile some of the breaks in the Central Hudson route will be made up, adding to the speed and comfort of cycling that way.

Illinois, Wisconsin, and Minnesota announce in co-operation the launching of a project for a bicycle path between Chicago and the Twin Cities—a distance of about 530 miles. The great Sheridan Drive already extends a great part of the way to Milwaukee, and sidepaths exist along much of the remainder. Lake Michigan is to be left at Milwaukee and a line struck across Wisconsin

to La Crosse on the Mississippi. This will run through Waukesha, Oconomowoc, Watertown, and other popular resorts in the eastern half of the State. Some rough and sandy country must be encountered from Portage, in Columbia County, to the Minnesota line, but nothing fatal to good cycle path construction. From above La Crosse the western bank of the Mississippi will be followed to St. Paul and Minneapolis, through Winona, Wabasha, Red Wing, Hastings and other small cities and towns. Of the final hundred miles, perhaps fifty are already sidepathed.

The present year is not likely to see the Manhattan-Minneapolis wheelway connection complete, but forward moves will be made at many points along the line. Meanwhile in other sections of the country the leagues will continue their local work, with the idea of joining onto other systems some time in the future.

Wheelways are to-day most frequently met with in the Middle States and on the Pacific Coast. But the bicyclists of the South and the Mid-West are becoming vitally interested in their building—and naturally so. The dark, rich soil of Western Indiana, Central Illinois, Iowa, Nebraska and Missouri, makes roads entirely unsuited for comfortable wheeling. Sand, swamp, and sticky clay equally handicap highway improvement in the South.

Intent, however, upon a quick solution of the problem, the wheelmen are constructing paths out of the materials nearest to hand. The first artificial wheelways in Florida are just now in contemplation, health resorts naturally receiving earliest attention. Leadership of the movement has been exercised in some instances by local improvement associations—that of Lake Helen, Fla., for one.

No comprehensive system of building has yet been formulated either in the Mid-West or South, each league working out its own independent plans, as the Northern leagues were doing two or three years ago.

The cycle path is first and last an American institution, and it carries American ideas in financing and building wherever it goes. Of foreign countries, Australia and New Zealand have been the most prompt in its adoption. That this is so is due largely to the fact that road conditions in the Antipodes

are very similar to those in the United States. Melbourne, in Australia, and Christchurch, in New Zealand, are already at work on routes into their surrounding country. In Europe there is not now, nor is there likely to be in the near future, any considerable effort in this direction. The need there is scarcely felt.

Heretofore, wheelways have been almost entirely confined to districts having poor roads. But within the past twelvemonth they have been constructed parallel to many of the best highways in the United States. This extension of the movement was not at first contemplated. It is the outgrowth of the understanding that a specially prepared course for bicycles and tricycles, and for no other use, is safer, cleaner, and less liable to obstruction at all seasons of the year than any other road.

The comprehensive system of road-making of the future will take heed of the best interests of wheelmen in this matter. Plans recently prepared for a municipal boulevard system in and about Toledo, O., incorporate provisions of cycle paths to run the full length of the new driveways. There is no good reason why this should not be; the example is worth following by other cities. Eastern New England has until lately been quite satisfied in the possession of the best roads in this country; but her cyclists are now demanding a separation from other traffic.

Bicycle touring increases in proportion to the ease and comfort with which pleasure trips can be made. In the days of the high wheels ("the good old ordinary") it was chiefly enjoyed by the agile and the venturesome. Comedy and tragedy alike followed its persistent practice. With the mechanical development of the bicycle and the perfection of the pneumatic tire, touring greatly advanced in popularity. The wheelpath affords a way carefully suited to the requirements of the end-of-the-century machine.

The cycle path is helping to do away with the rudiments of touring. Its extension over a large part of the United States means a vast accession to the tourists' ranks and a multiplication of miles pleasantly covered. It means less time spent in merely keeping up motion and in repairs to the machine. One hundred miles per day

may be made no more tiresome than fifty were under the old conditions. Two days' tours from New York to Albany or Newport, three days' to Boston or Washington, five to Niagara Falls, the Shenandoah Valley or the White Mountains, and twelve days' to Chicago, are within the certainties of the next few years. Special wheelways will make the record man's times of 1892 the ordinary touring times in 1902.

Provision of separate courses for the convenience and comfort of bicycle travel was first seriously suggested less than a decade ago. To-day it lacks attention only from the national government in the District of Columbia and the newly acquired territories. Every contribution, either of time, labor, or money, has been voluntary. The problems to be met have been of two kinds—financial and constructive—but falling to many ready hands and purses those have offered no bar to very satisfactory accomplishment.

To the right of way freely conceded by property owners, and the willingness on the part of cyclists to contribute individual mites of money and labor to the work, is due the most that has been accomplished up to the present time. No surer means of interesting practically the whole body of wheelmen and wheelwomen could well be devised. Many counsellors, armed with expert knowledge of some portion of a proposed route, gained in long experience with its unimprovement, are of more real value to such a project than the same number of disinterested contributors to the general fund. This is especially so after the first enthusiasm has spent itself in construction, and maintenance in repair is chiefly concerned. Eternal vigilance is the price of a good cycle path, and the more capable guardians of its condition there are the better.

The nature of the country traversed by a section of wheelway largely determines the character of the plan and work. Of hard-and-fast rules there are none. A path upon which single machines may safely pass at fair speed requires a minimum width of two feet. Three feet is ample, and four generous. Grading is chiefly done to secure evenness of surface and protective drainage. Little attention is paid to grading, the paths following the undulations of the ground even more closely than do the high-

ways. Alterations of surface are not attempted when easily avoided.

Where there is room, and when financial means are ample, it is advantageous to strike out an entirely new route between the existing road and the parallel footway. An exclusive reservation for cyclists is thus furnished, and the dangers of riding, especially at night, are diminished. The open highway then presents an appearance not unlike that of road, walk, and equestrians' course in the parks of large cities.

Cheaper and restricted construction works more or less on the old by-paths, and at times appropriates to its use a space alongside the road, but without losing its separate identity.

Frequent crossings in the search for the most readily adaptable ground are proving a mistake, for in such case future improvement must either abandon first plans or else carry them further. The former is fatal to well-ordered results; the latter permanently inconvenient.

Freedom from fixed requirements renders practicable hundreds and thousands of miles of wheelways.

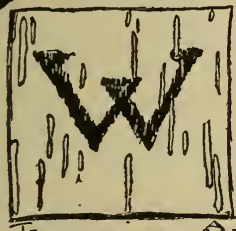
Nearly all materials which compact into good wearing surfaces are suitable for the making of cycle paths. Common gravel is the most universally accessible, and may be freely used, but it requires care lest premature passage over it, or heavy rains, spread the top covering. Fine broken stone makes same precautions necessary. Shale has no superior for easy riding, though ragged outer edges are apt to remain to interfere with turning in or out. Cinders of the hardest kind, properly laid and well beaten at the sides, form the most satisfactory all-round surface. Courses made from this material are most practicable in and about industrial communities. The most unsuitable of all materials is clay, which not only softens in wet weather, but loses its evenness in a season. Cement and asphalt have been suggested, and the former has been to some extent employed; but in service native elements prove best.

There is no good reason to doubt that the present movement will continue until the absence of a good cycle path will cause remark. The last year of the old century and the first one of the new will witness great advances in the undertaking.



THE BUILDING OF A BIRCH CANOE.

By Tappan Adney.



HEN sky shall be no longer blue and fair, and brooks shall cease to sing the song of summer, and lordly moose no longer tear the lily from its bed of mud, and lusty trout no longer flirt and jump for very love of living; when smiling birch and sombre spruce, and all nature, shall break their spell and cease to beckon, then, but not till then, shall I no longer love the birch canoe.

Perhaps my association of the red man's primitive craft with the woods and wild living things of the North, is because my first and most vivid impression of that region is of the building of a certain birch canoe, whose graceful form, as it grew from day to day under the magic hand of its Indian builder, I watched with boyish eagerness.

Peter Joseph, or "Pete Joe," as many preferred to call him, lived with aged Nokomis and a bright nephew of ten years, in a small house built of birch-bark, under the shade of some elms on a grassy point where Lane's Creek, bearing its smell of fresh, green, mossy woods, poured into the Wallastook, or St. John River—a situation such as Indians, everywhere in the East and North, are fond of choosing for their summer habitations. There were two or three other families, at or near "The Point," as the Indian settlement was known, all Milicites, or as they call themselves, "Wallastook-people," whose occupation may be described as chiefly basket-making; the men helping the squaws at this work, when not otherwise employed in spearing salmon, hunting moose, trapping, canoe-building, or guiding parties of sportsmen, according as their several tastes or necessity dictated and the season allowed.

An Indian, taught from boyhood the arts of woodcraft, becomes adept to a considerable degree in those matters which are part of his daily life; but they freely recognize among their number any who possess special skill, whether in calling moose or building canoes. And so, along the St. John River, while there were many who in some fashion could build a birch canoe, those whose canoes were known for their model and substantial build could be counted on the fingers of one hand. One of these was Peter Joe, although sometimes his name would be mentioned slightly by younger and more progressive Indians, who, having learned from white men the commercial value of time, had acquired the habit of throwing things together with nails and tacks, instead of patiently split sewings of root and fibre. He was about sixty years of age, reserved in manner, and dignified in expression; a kindly old man, willing to answer a boy's foolish questions about the names of birds and animals; explaining, while engaged at his labor, how to split and resplit the basket-ash, until it was but a thin, flat thread; how to bend the cedar without breaking, or how the jaws of the spear spring apart to grip the struggling salmon—everything a boy would want to know.

One day, after the snow had gone and the sap had started coursing through the trees; at that season when the air is laden with the smell of new leaves and opening buds, Peter announced that it was about time for bark to peel well, and if he could find a suitable piece of bark he would build a canoe.

The canoe—or paper-birch—*Betula papyrifera*, locally known as "gray-birch," to distinguish it from the "white-birch" of the "burnt land," is a plentiful tree in its northern range, but the quality of the outer bark, upon which depends the service of a canoe, varies exceedingly, and trees with the requisite thickness and toughness of bark, and of length and smoothness of trunk, are exceedingly scarce.

There are two kinds of canoe-bark,

known as "winter-bark" and "summer-bark." Ordinarily, during the period when sap is not flowing, it is impossible to peel the bark off the birch, except in strips perhaps no wider than one's hand; and the frost of winter, which freezes the tree as hard as iron, is another obstacle to the removal of the bark. But, during warm, rainy spells in winter, fires can be employed to thaw the bark, which from the great amount of resin it contains, becomes pliant under heat; and by using care, with the help of wedges, it can be stripped from the tree. "Winter-bark" is thought to be tougher than "summer-bark," but the danger of spoiling a fine piece is such that the risk is not often taken. It is a "summer-bark" canoe that I am about to describe.

About three miles back from the river, was a grove of canoe-birches, to which the Indians for fifty miles around resorted for canoe-bark. But the trees, though covering a considerable extent of ground, were so scattered among maples, spruce, and yellow birch that the existence of the grove was known to comparatively few white people.

We set out from the camp one morning in June, with only our axes, and the Indian's hunting-knife, took the highway for a mile or two, beyond the first tier of farms, and then plunged into the primeval forest. The gray and white

bark was too thin, the "eyes" of that were too numerous and large. In others the bark was prime, but the trunk was neither straight, nor tall, nor large, nor free from knots.

"Sartin, I spose them Injuns from Tobique git all the good bark," said Peter, as he bent and twisted a sliver of bark and tossed it upon the ground, and looked around for another tree.

Finally, after I had begun to think we should not find one that suited, we came to a tree which reared its head high above those in its neighborhood; tall, twenty feet to the lowest limb, sixteen inches through at the butt, with thick, heavy, fine-eyed bark—a perfect specimen of a canoe-birch.

"How are you going to peel the bark, Peter?" I asked, thinking that some sort of scaffolding would have to be erected around the tree.

"'Y gorry, we peel-um all right," replied the Indian, as he looked upwards, as if sighting for some purpose. Then he began clearing away the undergrowth on one side of the tree, and I fell to work with my axe, without asking any more questions. When we had done this, he felled a sapling about as big as a man's leg, and cutting off a piece five or six feet long laid this upon the ground close to the butt of the canoe-tree. Then I understood that we were going to cut the tree down, and that the log was to prevent the birch

when it fell from burying itself in the soft moss, which everywhere carpeted the ground. We put our axes to the butt, Peter making the inside cut, and in a few moments

the tree began to crack, and then with a few well-

directed cuts on the outside,

it toppled and fell with a smash, exactly where the Indian intended.

The sapling at the butt, and the limbs of the tree itself at the top, held the trunk clear of the ground by several inches.

"Sartin, that's good piece of bark. Make-um good canoe this time," said the Indian, as he sat down on the log and inspected the fallen trunk.

We started peeling the bark. The Indian, with his hunting-knife, made a cut encircling the butt, and another



Peeling the Bark from Tree.

forms of the birches began to appear among the others, and the Indian went from tree to tree, chipping a piece of bark from each, near the butt, so as not to spoil a possibly good piece. This

around the other end, connecting them with a straight cut along the top. Lifting the edges carefully along the entire length of the cut, and gradually working with our hands, in a short while the fine, yellow bark, in one sheet, eighteen feet long and over three feet wide, and without a blemish, was freed and fell to the ground.

Peter Joe built a fire of scraps of birch-bark, and then warming the sheet over the fire to make it pliant, we rolled it up as one would a carpet, and lashed it together with bands of cedar-bark, or "Injun rope," with an additional sling for carrying over the shoulders.

Before we left the grove we found a smaller tree, which we peeled in like manner, and then each taking up his load of thirty or forty pounds, we returned to the camp. There Peter placed the larger roll in the river, weighting it down with stones, and anchoring it securely to the shore with "Injun rope."

The order in which a birch canoe is put together is exactly the reverse of what a person familiar with ordinary boat or ship-building would suppose. Instead of first laying a keel and constructing thereon a frame of ribs of exact shape of the finished craft, and then covering this mould with sheathing, the sheathing, or bark, of the canoe is put directly into a shape as near the finished form as possible, and the ribs, which are bent beforehand, each to its right form, are placed in afterwards.

Each tribe of Indians in the birch-country makes a style of canoe differing more or less from those of other tribes. They vary in outward appearance from the curiously "humped" canoe of the Restigouche River, in New Brunswick, to the small, half-kyak form of the Klondike, but in all the same peculiarity in construction is to be observed.

The woodwork of our canoe was to be of clear, straight-grained cedar, and only the heart at that. With an eye to the future, Peter had watched for and discovered among the thousands of logs that floated past the camp during the spring "drive" of the lumbermen, a fine cedar that was unmarked, and therefore, according to common usage, was his for the finding. He had speared it with his pike-pole, and drawn it out on shore. Except for this good fortune we should probably have had a long

search for a tree to answer the purpose.

While the bark was soaking Peter split the cedar log, and with his "crooked-knife" whittled out two strips an inch and a half square and about sixteen feet long. These, which he called the "gunwales," he lashed together at



Carrying in the Bark.

the ends with spruce roots, and braced them apart, like two bows, with five rock-maple cross-bars, the middle one being thirty inches long.

The "crooked-knife" is an implement used by woodsmen, both white and red, wherever in British North America I have been. In the East I was inclined to think it rather an invention of the lumbermen, until I saw in use by the Indians on the Klondike River a knife in every respect the same as that used by Peter Joe on the banks of the St. John. It consists of a thick, narrow blade, about three inches long; sometimes straight, but usually with a more or less distinct curve. This blade is set into a wooden handle, shaped so that it may

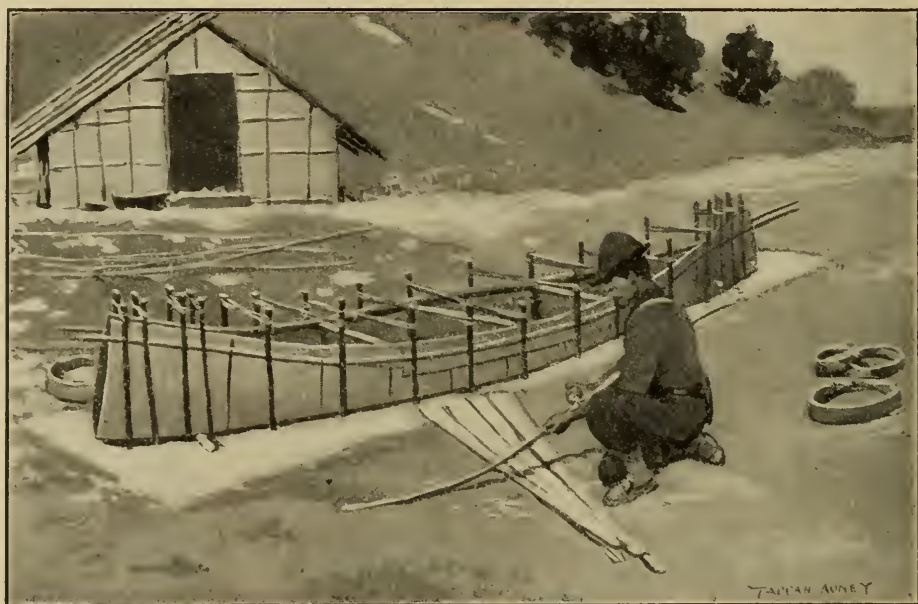
be grasped in one hand, with the thumb pressing against a flat place, the handle being given a turn, like a fiddle-head, for that purpose. The workman sits on the ground or a low stool, with the piece to be shaped in the left hand, and the knife, held dagger-fashion, is drawn toward him with a long sweeping motion, removing thin shavings as perfectly as a plane or draw-knife.

The crooked-knife user becomes so accustomed to whittling this way that he very seldom whittles "away" from himself, even when cutting a stick in two.

The ribs were taken out of the best part of the cedar. They must be split with their flat sides parallel with the bark. If taken with the edges toward the bark across the grain, they will not bear the strain of bending. The ribs, to the number of forty or fifty, and about as wide as one's hand, and half an inch thick, carefully smoothed by means of the crooked knife, were soaked for several days in the river, and then bent, two at a time, hot water being poured over them to increase their pliancy. It is remarkable how each pair of ribs is bent beforehand to the exact form of the finished canoe, every other pair having a different curve, as though the builder saw in his mind's eye the finished form of the canoe. Here is shown the experience of the canoe-builder. After the ribs are bent to the right shape loops of cedar-bark are put around to keep them in place, and then they are laid in the sun to become perfectly dry, when the bands may be taken off and the ribs will retain their shape.

While the ribs were seasoning, Peter leveled off a piece of ground near the camp twenty feet long and a yard wide. It is not quite correct to say "leveled," for although to the eye the "bed," as it is termed, appeared level, it was about two inches higher in the middle than at the ends. This raising of the middle is positively necessary. Sometimes, in-

stead of bare ground being used for the bed, a platform of boards is used, whereby the middle can be raised, as already described, with less trouble.



Shaping the Model.

The gunwales were now placed upon the bed, and the two ends supported upon pegs two inches high. Then twenty to thirty stakes, two to three feet long, were driven into the ground around the gunwales, at intervals of about a foot. When this was done, every stake was pulled up and put aside, each beside its own hole.

The gunwales were next taken up, and the bark unrolled and spread out on the bed, with the yellow, or outer, side down. The gunwales were then put back on top the bark and weighted with heavy stones. It was fascinating to follow each step, wondering how many generations of canoe-builders it had taken, that this Peter Joseph should be able, without a mistake, to build a boat thus "backwards."

The bark had now to be bent upright around the frame. But to do this, little V-shaped slices or gores had to be taken out every foot or so, along each side of the bark; and then without difficulty each flap was bent up, and as this was done each stake was slipped back into place to hold it there.

Next the gunwales were raised (the bark remaining flat upon the ground), and under the end of each cross-bar was placed a post.

Two eighteen-foot strips of cedar

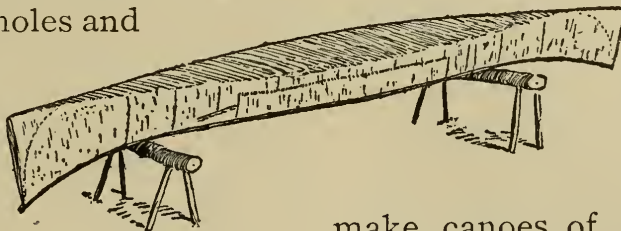
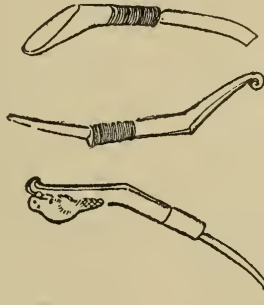
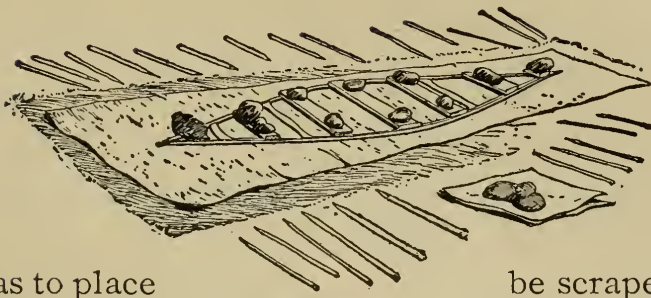
were pushed inside the stakes and lashed through the bark to the gunwales, thus securing the edges of the bark firmly.

The next thing was to place the canoe upside down on two "horses" and round off the ends, either by the eye, or with the help of a pair of wooden dividers. A thin bent stick of wood was slipped in between the edges of the bark, bow and stern, and sewn over and over with roots. The canoe was then turned over on the grass and the larger holes and cracks pasted up with strips of bark and a "pitch" made of certain parts of pine-rosin and grease. The inside was then lined completely with very thin strips of cedar running lengthwise, and the ribs, which were by this time as dry as a bone, were driven one by one into place, commencing at the ends and ending amidship. A narrow oval board was set into the two ends, which had been stuffed with shavings, and a long strip of cedar nailed on top of the gunwales, and lashed at the ends. The cracks outside were then plastered with pitch, which practically finished the canoe, upon which Peter Joe had worked three weeks.

Before the canoe was placed in the river it was partially filled with water, which immediately disclosed some holes that had escaped observation, and these were plastered with pitch.

Canoe-bark is at first a bright golden yellow, which soon turns upon exposure to a rich golden or reddish brown. This after many years' service becomes quite gray.

"Winter-bark," in being stripped from



the tree, brings up some of the under bark, and this after a little while turns a rich red. This surface, being somewhat rough, must be scraped off by wetting the bark; but usually portions of the red color may be left on, in the form of a decoration several inches wide below the gunwale, like a necklace or garland around the entire canoe. Often, on the finest canoes, some figure, as a star or an animal, or a bold Indian hunter with a tomahawk, may be seen, together with the maker's mark or name.

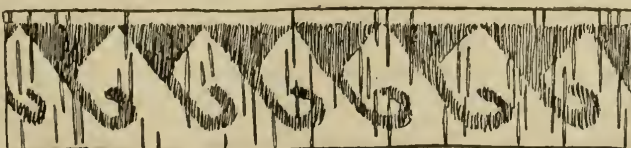
White men now make canoes of canvas, following the lines of the birch, and these are thought by many to be superior to the birch. Birch canoes are still in general use, but it would seem that unless the birches grow faster than the Indians are stripping them, the time is not far distant when the birch canoe will exist only in museums, and in the memory of lovers of wood-craft.

I never thought to ask Peter his opinion of a canoe built of cedar "limbs," like the legendary one that

"floated on the river
Like a yellow leaf in autumn—
Like a yellow water-lily."

I am certain, however, that Peter, careful workman that he was, would have regarded the canoe constructed in the imagination of Mr. Longfellow, as "mutjogo ahgwed'n—sartin, very poor canoe."

But then, as Mr. Burroughs has somewhere remarked, referring to a similar poetic license, one should not "smelt the poet's gold in the naturalist's pot."



THE UNIVERSITY SOCIAL PROBLEM. ITS RELATION TO UNDERGRADUATE ATHLETICS.

A SYMPOSIUM OF UNIVERSITY OPINION.

THE CONDITION AT HARVARD.

BY CHARLES MACOMB FLANDRAU.

IN the face of Harvard's recent athletic victories, one cannot but be conscious of a certain ungraciousness in an opinion which still refuses absolution to a social system that has so long been held responsible for Harvard's athletic defeats. Of late Harvard has excelled worthy rivals on water, diamond, and gridiron, yet "the social system" that has obtained since the institution developed from a small college to a great university still endures. It would seem that the manner in which undergraduate life at Cambridge quite naturally adjusts itself, had been, in its relation to athletics, maligned.

To some extent it unquestionably has been. The practice of ascribing to Harvard's unique system of clubs, every ill to which the university's athletic sports have in the past been heir, arose partly among the partisans of strikingly different systems in vogue at other colleges, and partly among the socially disgruntled at Harvard itself. This convenient method of solving Harvard's problems was on the one hand necessarily superficial, and on the other, inevitably, extreme. Realizing these facts, the socially satisfied faction at Cambridge has, with fine but mistaken loyalty, ignored the essential truths upon which both the sweeping assertions from outside, and the severe individual criticism from inside, have been so often based.

Space forbids anything like an exhaustive analysis of so complex a subject as Harvard's social organization, but at least a brief review of its more conspicuous features is necessary to an understanding of the truths of which they are the fountain head.

The social organization of Harvard is, for a single institution, incredibly vast. Composed of men from approximately every State in the Union and from every social sphere, it is as diverse in its constituent parts as the conditions

of American life itself. Properly speaking it is not an organization at all. For, given the immense variety of its ideals (or perhaps prejudices is the truer term), its ambitions, its possibilities, and the peculiar local conditions under which for four years they are accustomed to exploit themselves, it is scarcely remarkable that the word "organization" as applied to Harvard society should have long since lost its real significance.

The local conditions most operative in disintegrating at Harvard the unity of emotion and of aim that the general public counts on in a student body are, first, the complete freedom of thought and (within the bounds of decency) of action, that every Harvard student is generously permitted to enjoy; and secondly, the proximity of the inscrutable City of Boston. Neither of these privileges—if I have been rightly informed—is shared by the other great universities of this country.

The first of them is more comprehensive in its import than one might suppose. It enables the student to study only what he wishes to, and in the manner most convenient to his ability and habits; it enables him to live unconcernedly where he pleases, and on a financial scale best adapted to his father's temperament. Instances are not rare at Harvard of men who, on the one hand, belong to the most exclusive clubs, go a great deal into Boston society, and live in a room barely large enough to contain a bed, a bureau, and a tin bathtub; and, on the other, of men who belong to no clubs, who have never been asked inside of anyone's house in Boston, and who have very expensive and sometimes beautiful apartments as well as horses, traps, and a servant. Yet no one criticises the one for his economy, or the other for his extravagance.

The absolute freedom accorded the individual at Harvard enables him to regulate his manner of life, his serious pursuits and his recreations, very much as he might in any civilized and rather

cosmopolitan community. He may, during his residence at Cambridge, retire to an alcove in the library, or he may endeavor to make his personality felt in any or all forms of undergraduate activity. His inclination in either case is respected.

At college, as elsewhere, men seek their own kind, and in an undergraduate body so numerous as that of Harvard they usually find it. The various "sets" at Harvard are a fascinating pocket-mirror of the social orders that exist in the country at large, and it is not surprising that men of similar social traditions have established clubs from which men of different traditions are, as a rule, excluded. That the fastidious character of these altogether charming features of Harvard life can be maintained is due almost entirely to the proximity of what a recent writer shrewdly described as "the decaying provincial aristocracy of Boston." For it is from Boston and its environs that they take most of their members, and all of their individuality. In at least one of Harvard's fashionable clubs, membership bids fair to become hereditary. There are, it is true, many startling instances of men quite unknown in Boston or anywhere else, who have been elected into these institutions, but the instances are, after all, startling.

The influences that these conditions have on sport at Harvard is precisely what one would expect. Men, as a rule, engage in athletics there, not because athletics are the aim and end of undergraduate existence, but from an admirable love of them. The crews and teams are for this reason often composed of fellows who, beyond the particular sport in which they chance to be associated, frequently do not possess a single idea or interest in common. Then again it happens that a team comprises an unusual number of men socially prominent. The cry of favoritism in selection is, of course, immediately raised by a public to whom it never apparently occurs that youths who have spent six years at Groton, St. Mark's, or St. Paul's, are more likely to be interested and skilful athletes than youths who enter Harvard from the interior of Kansas. Now, in either case, the effect on sport in a general sense is peculiarly Harvardesque. On the one hand, the members of the teams themselves lack

the complete comprehension of one another—the mutual sympathy that comes of a more or less identical academic experience; and, on the other, a deep enthusiasm and intimate personal sense of proprietorship on the part of the college public is not exactly withheld, but is not always vigorously, sincerely felt.

Without fraternal bonds more vital and intense than that of knowing one's name is printed in the same catalogue with twenty-three hundred and some odd other names, the spirit of sport in any universal significance becomes, at times, depressed. At Harvard the fraternal bond is slight. Everyone is ardently loyal to Harvard; but it is more because Harvard is *his* college—not because it is the college of a throng of fellowmen, whose daily life and enthusiasms he might under different conditions share. "Class feeling," except in unextemporaneous speeches at Junior and Senior dinners, has been largely superseded by "club feeling." The feelings of the students who do not belong to clubs are unfortunately too diffused to be effectual.

However, that Harvard is magnificently capable of "getting together" when just the right chord is struck, has been shown when, gathered under one roof, all the apparently irreconcilable factions of the college are merged in a great, eager assent to the magnetic utterances of Mr. Lehman, or the compelling creed of Mr. Roosevelt. For the moment—but for the moment only—occasions like these furnish the common human interest that Harvard perennially needs.

I have not had the opportunity fully to inform myself of the less obvious reasons of Harvard's recent gratifying successes in athletics. They may have been the effect of a variety of causes, beginning, perhaps, with the specifically disastrous yet generally inspiring advent of Mr. Lehman. But I am convinced that they were achieved in spite of a social system that necessarily tends to destroy the unity of athletic purpose.

YALE'S POSITION.

BY WALTER CAMP.

Athletics at almost every turn are encompassed by, and dependent upon, the social organization of the college or

university in which they exist. The more popular athletics become, the more intimate grow their relations with the social structure. For this reason society systems and athletic governments must be properly adjusted one toward another, or each becomes weakened by the presence of the other.

At New Haven twenty years ago the social structure had within it an arrangement of societies such that practically every man on entering college had an opportunity of joining a so-called society, offering a meeting-place where he made the acquaintance of his fellow classmates, and saw something from time to time of the men in the upper classes. Sophomore societies were under the ban of the faculty, but in Junior year the societies once more reappeared in the shape of the Greek letter fraternities, and while these were not so large as the Freshman societies, they pretty fairly covered the best element of the class. In Senior year there were two societies, each taking fifteen men, and this final selection of thirty men from the class was regarded as the measure of a man, and an election stamped his course as successful.

Sport at all the colleges in those days was much more narrowly confined, but at Yale it was organized, and that organization working in harmony with, and taking much strength from, the social system, gave each man an opportunity for a final reward; and made it possible for Yale to inaugurate that series of athletic successes extending over a period of some fifteen years which has never been equalled, and which probably never will be equalled or surpassed by any other university. The individuals in Yale were willing to sacrifice some measure of individual liberty for the sake of acquiring that power which organization alone can effect.

In fact, Yale was in those days reaping the advantages of being a little ahead of her times. There were individual vigor and virility, but these were made a part of an effective general organization, which gave them the additional power of concerted action. In this scheme the societies worked as effectively as did the athletic management. There was no jealousy or desire to put forward individual members of a fraternity as such. The class system

of societies was a strong safeguard against this. Men who were in the same society in Freshman year would very likely be separated in Junior year, so that the strength of the fraternity bias which has warped the social system in so many colleges and universities was thus minimized. I am not speaking of the Sheffield Scientific School, which in those days was much smaller in proportion and much less important in an athletic sense than now, for in the Sheffield Scientific School the system of societies was that of the usual fraternity character, membership running through the entire course. This was quite distinct from the system in force in the Academic Department.

Just previous to the beginning of the eighties the Sophomore societies were once more revived. At that time it was little supposed that the Sophomore Society would grow to anything like its present state of strength and importance. Nominally debating societies, they speedily took on more and more of the old society order until their attractiveness reached a point where, aided by the restrictions of number, they became of greater importance than the Junior societies. Freshmen societies had also been interdicted, and thus the Sophomore society became the main factor of social distinction in the first three years of the college course. Just what the effect of these changes has been upon the athletic organization it is hard to determine and state with authority, as a great many modifications in the athletic methods must have come naturally from the increase in numbers, no matter what the social or society influence might have been.

But the point upon which athletics and the societies must inevitably always touch is that of the election of managers. Here it becomes a question of votes, and as there grew up some measure of feeling between non-society and society men, it was more and more apparent that sooner or later the non-society element would make up for what they felt to be the exclusiveness of the societies by taking care that representatives of the societies should not enjoy gifts in the way of offices which lay in the vote of the class.

The manager of any one of the four great organizations of football, baseball, boating, and track athletics at New Haven

is elected by a university meeting where each member of the university has a vote. The duties of that manager are widely spread and of the greatest importance to the University in an athletic sense. It is imperative, therefore, that he be an able and representative man. Anything like putting these offices in the hands of men lacking ability means suicide for Yale's athletic interests, and it is here that the first results of the conflict are likely to appear. As to the general effect of the societies upon athletics in the way of selection of teams, interest, and patriotism, there is little to say. There will always be social reward for successful men, whether in a circumscribed community like that of a college, or in the larger one of the world. But when any directory is very much torn by dissension, the manager which the directors elect is not always sure of being the best man for the place, and it is upon that problem that Yale men—both society and non-society—are at work, and a successful solution is neither impossible nor improbable.

Something can be learned here also from earlier history. There have been other times when feeling has grown intense between two factions in college life, and the faction which possessed the lesser numbers has retired diplomatically from every field where there was a possibility of an issue, leaving time to adjust grievances, rather than attempting what was manifestly a losing fight. The desire in a college as well as any other community to correct abuses seems to be proportionate to the degree with which these abuses are brought to the front, either by flagrant flaunting of them or still more frequently by the commotion caused when a crusade is instituted and those responsible for the supposed abuses resist that crusade. Hence this withdrawal has often been the successful method of the societies. In this particular instance affairs have proceeded past that stage, for although the Sophomore societies at Yale had practically withdrawn from politics, the Senior non-society body petitioned the faculty of the university to abolish these societies. The faculty suggested a committee of the students to look to the matter as a more suitable solution of the problem. Such a committee is at this writing laboring at the question. Mean-

time the intensity of interest in the affair has waned, and the issue is no longer the general topic of discussion that it was a month or two ago.

Just in proportion as the difficulty nears or recedes from the acute stage are its results upon athletic interests more or less serious. Any break whatever in a college community is harmful to its athletic organization, for it means lack of cohesion, and very likely the selection of inferior men for positions of responsibility. If the disease of disagreement, instead of being cured, runs on into a chronic stage, it does not have such apparently marked results, but is surely likely to gradually weaken unanimity of action.

Moreover, the admission of an influence outside the university, which usually follows a long-continued disagreement within, is a difficult factor in any athletic question. A disagreement means the dragging all sorts of questions into publicity—not the publicity of the college community, but of the general public. Any habitual invitation to the public to take a hand in college quarrels means dissolution, for it means substituting for the college judgment and standards the judgment of a public too hurried and too busy to be always fair. That view every faction in a college community should consider before carrying all the details of their problems to an outside tribunal for settlement, and this the Yale committee appreciates, while Yale undergraduates and graduates are proverbially slow to argue their affairs in the newspapers or to request the public to act as judge.

THE SITUATION AT PENNSYLVANIA

BY CHARLES L. MC KEEHAN.

A stranger seeking information on a topic such as this might well put as his first question, "What kind of a position does the successful athlete occupy at Pennsylvania? What honors or privileges come to him that he would not receive except for his athletic skill?" So far as any specific, tangible honor is concerned, the answer must be, "Why, he gets very little." He is not elected to any club or society by virtue of his being an athlete. Take the fraternities, for instance, the centers of

so much of the social life of the university. It almost never happens that a man is invited to join a fraternity at Pennsylvania because of any distinction he may have obtained as an athlete. Of course a considerable portion of our athletes are fraternity men; but it is not by reason of their being athletes that they are so.

Indeed, the great majority of men who join fraternities at Pennsylvania do so during their Freshman year, when few if any of them have ever played on a university team. The same observation holds good as to the college literary societies, the medical societies, the dental societies, and the law clubs—student organizations formed in the various departments for purposes of study and social intercourse. It rarely happens—very rarely, indeed, in the best of them—that athletic ability counts for anything in securing an election to one of these organizations. Of course, however, the fact that a student is a member of one of the university's athletic teams, does secure for him a gratifying and honorable distinction among the student body. He is widely known, the students are proud of him, and there is at Pennsylvania, as elsewhere, a touch of hero-worship for the man who has helped to win an important athletic victory and thereby exalted the university's name.

I think it is pre-eminently true of Pennsylvania—indeed, it might almost be inferred from what has been said—that the spirit in her athletics is essentially democratic. The University Faculty Athletic Committee has the sole supervision, both as to amateur status and as to what proficiency in his studies shall entitle a student to be a candidate for an athletic team. Once this committee has declared a student "eligible," the single qualification that must secure for him a position on the team is that from an athletic standpoint he is the best man for the position. At Pennsylvania the coach picks the team. And manifestly his one interest is to select from those candidates given to him, the men who will win.

The same spirit pervades the selection by the teams themselves of their captains. The choice is left unre-servedly to the team to select the man who will in their opinion best inspire the confidence of the men and hold

them together, work cordially with the coach, and turn out a winning team. I can recall scarcely a single instance in the past seven years—certainly not more than two—in which fraternity influence, or a man's social standing, or any such consideration either dictated or appreciably influenced the choice of a captain.

There is one other aspect of the relation of our athletics to the social life of the university—not often commented upon—not duly appreciated, perhaps, even by Pennsylvania men themselves—yet which has been of infinite importance to the university. I mean the great part that athletics have played in developing a university spirit among the students as distinguished from what we may call the department spirit of years ago—the attitude of mind by which the student regarded his own department, and not the whole university, as the unit of which he was a part and to which he owed allegiance. This change in the mental attitude of the students—this change in their conception of what the university really is—has been the most distinguishing characteristic of the last seven or eight years of Pennsylvania's development. Even the increase in the material resources of the university, great though it has been, has not been so noteworthy as this.

Of the causes which have wrought this change—the importance of which can hardly be overestimated—none have been more potent than the fact that during the past eight or nine years the students have had in their victorious athletic teams objects of common interest, in whose successes all shared alike. The teams drew from all departments. They stood, not for the College or the Law School, but for the university. Their victory was the university's victory. Here was one large interest in which all ideas of separate and distinct schools melted before the idea of one university, where all joined hands in pursuing the same objects, stimulated by the same hopes, enthused by the same successes.

A different result is more often attributed to athletic success. It is frequently remarked of Pennsylvania (and of other universities) that a large increase in the number of students has been the chief result of athletic victories.

A very brief inquiry will show the error of such an observation. In 1892—before which time our athletic teams had achieved only a very moderate success—the number of students at the university had risen to 2,055. Since then it has risen to 2,673. Yet of this increase of 618, more than 500 is to be accounted for by increases in the departments of law, philosophy, dentistry, and in the courses for teachers—whose students would be influenced in selecting a university, least of all, perhaps, by considerations of athletic success.

Pennsylvania is indebted to athletics far more for the influence they have exerted on her own students, than for any impression they may have made on the general public. While far from being the only cause, nevertheless they have been one of the most potent causes in welding the university together—in substituting a university spirit for a spirit which was too apt to regard the departments as separate and distinct organisms with merely the administrative officers of the university as the chain that linked them weakly together. This revolution in the whole mental attitude of the undergraduate body has exerted a profound influence throughout every phase of the social life of the university, and it is both interesting and important to observe that this is due in a large measure to our genuine love of true athletics.

CORNELL'S EXPERIENCE.

BY H. S. WHITE.

In reply to the inquiry of OUTING regarding the influence which the society system at Cornell exercises upon college sports, the answer may be given that the system has exercised there, in general, a helpful and beneficial influence upon athletics. The nature of the society system at Cornell is briefly this: In the university, chapters exist of twenty or thirty fraternities, comprising several hundred students. Here as elsewhere one may mark the growing influence of these fraternities upon university life, an influence which I believe to be upon the whole salutary.

After one has duly criticised the inevitable expenditure of time, the occa-

sional devotion to class politics, and the possible danger of drifting into cliques, which membership in such societies may entail, there remains a considerable leaven of beneficent activity. Uniting representatives of all years and all courses, the societies counteract, on the other hand, the tendency toward separatism. The care and maintenance of chapter-houses develops a sense of responsibility, and the frequent exercise of hospitable functions encourages the social graces. Even the supervision of the university work of recalcitrant members is one of the sporadic duties of such societies.

Comprising so large a proportion of the student body, the fraternities become naturally a center of activity, and form the principal supports of those interests which appeal to the undergraduates as a whole. It is right to say that the fraternities have developed a high degree of public spirit, and bear their full share in maintaining by word and work all student interests. One of the most important of these interests is naturally athletics.

If the question is put to what extent the captain and managers, and team members of the different branches of athletics are drawn from the societies, the answer would be obvious. The members of the bodies which support athletics must contribute the majority of those who are actively and personally therein engaged. This does not mean, however, that students who are not members of societies are overlooked either in elections of officers or in the selection of the teams, because they are not.

A word of explanation regarding the organization of athletic sports at Cornell will make this clear. Apart from the faculty committee on student organizations, athletics are controlled by the Athletic Association or Council, which centralizes the various interests, acting as an advisory board for the managers of the teams, assuming control of the athletic equipment and of the finances, suggesting eligibility requirements, and exercising jurisdiction in all matters which may influence questions of general policy. This association has been composed of the managers and captains of the four leading branches of athletics—boating, baseball, football, and track and field athletics—five

faculty members, one university trustee, and one member at large. (During the present year an enlargement of the association has been effected, giving to the alumni a voice and vote.) The numerical majority has been left in the hands of the undergraduate members.

The details of each branch are supervised by a committee of three persons, namely, the manager and captain, together with the graduate advisory member for said branch. This organization has tended to produce a greater steadiness in the management of athletics, and has resulted in some continuity in the transmission of athletic methods and traditions. One feature of the organization is that it elects all managers and assistant managers, while the election of the various captains, although made by the members of the respective teams, must be ratified by the council. Through this feature of the organization a check may be put upon any apparent tendency toward the formation of society rings or deals.

The writer, however, although closely following the course of athletics at Cornell for the past twenty years, has seen very few indications of such tendencies. He has on the contrary frequently witnessed the spectacle of members of the council disinterestedly opposing the election of men of their own society and conscientiously urging the election of men from rival fraternities. A similar check upon the possible influence of society affiliations in the selection of the members of the different teams, may be found in the relation which the various coaches sustain to that duty. In boating, indeed, the coach is solely responsible for the make-up of the crew, and the coaches' views have also great weight in the other branches of sport.

The tendency of the system is toward the choice without fear or favor of the men best qualified to represent the university. That the results may not always be absolutely satisfactory and impartial should be ascribed to the passing vagaries of human nature rather than to the effect of any society favoritism. With this slight reservation the fraternity system at Cornell must be accounted one of the valuable adjuncts in the development and maintenance of college sports.

AS THE MIDDLE WESTERN UNIVERSITIES VIEW IT.

BY JAMES A. LEROY.

It is probably true that college societies in the Middle West have been mainly instrumental in bringing competitive athletics in this section to the grade where the best teams will bear comparison with those of the East. It is also true that some of the greatest detriments to the healthful progress of sport among the universities of this section come from the presence and influence of these societies—or "fraternities," as they are invariably called in this section—on the life of the undergraduates. In the weighing-out process, it is at this stage impossible to say which are the greater, the advantages or the disadvantages of the fraternity system.

The large educational institutions of this part of the country are young; this is plain when it is noted that the University of Michigan, established in 1837 and opening its doors in 1842, is considered venerable among them. They have, as a rule, no such large bodies of alumni as the older institutions of the East. Even where the list of graduates is respectable or large, it is by no means a compact body. These universities have been playing the rôle of pioneers, and their foster sons have pushed on to the westward again and are far more widely scattered than the alumni of the New England institutions.

The college fraternities have, until very recently, been the main means of communication with the alumni, the easiest, sometimes almost the only, way of keeping them in touch with the affairs of their alma mater. The undergraduate chapters have kept their fellows of earlier years in line with the college teams, and have thus been, in a large measure, responsible for the support and enthusiasm which have produced the progress of the past few years.

At the same time it is to be said that college sports themselves, wholly outside the question of the college societies, have done wonders in fostering an active interest among alumni and toward binding them together. It is undeniable that the younger alumni of the universi-

ties of the Middle West are, to a great degree, the alumni who keep in touch with their alma mater; the older alumni who do so are the exceptions. The past few years has witnessed a great growth in this alumni spirit; perhaps not a little of it is to be credited to the college societies.

Then, too, the college societies, with their rivalry of their Eastern brothers, have been in a great measure responsible for the eagerness with which the Western teams have vied with the best in the East, until at last they have reached a plane where they can meet the latter with fair expectations of success.

But this would not be telling the whole story. It is now the pretty general rule among the universities of what might be called "the Chicago section," that college athletics are involved in cliques and political rings which generally have their origin in the jealousies of the undergraduate fraternity chapters. Athletism in most of the larger institutions here has been undergoing an evolution of management, out of the hands of the undergraduates into the hands of the faculty and alumni, principally the faculty. But so far as the undergraduates do still control, it is quite common for fraternity politics to be a baneful source of ill feeling and sometimes mismanagement. The University of Michigan just now affords, perhaps, the most lamentable example of this. The fraternities there have not profited by the experiences of former years and, in their scramble after athletic honors for their members, have embarked upon something like a "rule or ruin" policy.

As has been the case at this university and elsewhere in the Middle West in former years, the spirit of fraternity rivalry is just now running too high and needs a curb ere it becomes a positive evil in college life, instead of a benefit.

Negatively, it may be said against the college societies of this part of the country that they were in no way the leaders, or even early participators, in the movement toward cleansing college sport of professionalism and toward putting it upon a higher plane ethically. Positively, and in their favor, it is to be added that among the fraternity men are now to be found the

chief supporters and missionaries of the cleanliness that was made the rule by others' labors.

Making no attempt to enter into the question of whether or no fraternities do good, or do harm, in the colleges of the Middle West (nor into the much less debatable question whether or no they do good to the undergraduate who belongs to them), it is yet to be said that the fraternities have not done for athletics in the Middle West what their high pretensions and the character of the pledges taken by their members might have led one to expect. No moral reforms have emanated from them; their morals have been the morals of the athletic manager who wants easy success. Having been aroused to better things, it ought to be expected of them that they would be keenest in spreading the gospel of "sport for sport's sake"; but just now they are too commonly dissipating their energies in petty squabbles over offices.

In the early days of Middle-West college athletics, it was quite common to see the membership of athletic teams influenced by the "pull" of this or that fraternity. That has been far less common for the past six or eight years, as stress of competition and general improvement in the form of the teams have positively demanded the selection of players on their own merits. It must be said, however, that it is not quite a thing of the past, even now.

The college fraternities afford the best means by which the alumni may exert a beneficial influence upon undergraduate sports, and just now is a good time for the alumni of the college fraternities of the Middle West to exert that influence. They can in that way do a great deal to inculcate a little more soberness, a little less bitterness, toward rival universities, and less extravagant notions as to coaching, etc.

As the leading fraternities have chapters in each of the large educational institutions of this section, they have been already one of the most powerful means of inculcating good fellowship, on the field as well as off, between the students of these different institutions. The Westerner does things strenuously; but the ties of fraternity brotherhood have often enabled him to see that strenuous competition by no means necessitates unsociable or bitter rivalry.

EXAGGERATED TYPES OF BULLDOGS.

By H. W. Huntington.

DESPITE the difficulty and expense of getting really good dogs, and the still greater difficulty of raising puppies, the popularity of the bulldog increases all over the country; ladies are now rapidly becoming his most ardent admirers, and no better or more gentle or faithful canine ever existed, or one with a better disposition.

It is rather, however, his characteristics as a defined type and his conformity to, or departure from, the standard of points set out in the official edicts, that I would consider upon this occasion. Off the bench, individual taste may wander where it pleases, but on the bench, breeders and dogs alike should conform to laws and standards.

From this point of view one might well be confused by the awards at the late show of the Bulldog Club. The standard of excellence adopted by the club calls for a "thick-set, broad, powerful and *compact* dog, with body short and well knit," the whole contour conveying "the impression of strength and *activity*." Yet one looked in vain for an exhibit that complied in conformation with these essential points.

Perhaps within the last decade no breed has been so tampered with as the bulldog, or so subjected to the innumerable whims of the faddist. By some he has been converted into a veritable crocodile, with a back as weak as a reed, wholly devoid of the "strength and activity" called for by the standard. By others, the entire conformation has been made subservient to "head properties," and the dog has been transformed into little else than a monstrosity. One characteristic after another has been made paramount, till many prize winners seem, to the true lover of the breed, little else than cripples.

The perfect-to-type bulldog should be massive, active, and full of life and vigor. How many can we find to-day that are? Where can we find another Britomartis, His Lordship, King Lud, British Monarch and Silena? Of a verity, not upon our present-day show benches! At the recent Bulldog Show, where were the dogs with grand underjaw, large temples, big nose, small, thin ears, well

carried—that rare point—the arched neck, short roach back with well cut-up loin, and low, set-on tail? And again, the big-boned straight foreleg, deep brisket and well-sprung rib?

In the recent show of bulldogs in New York were three distinct types in the dog classes, Katerfelto, Delaware and Baron de Merley. The first is of the old sort, with magnificent head properties, a perfect study to any fancier, with that well-turned-up jaw, so often wanting in our modern prize-winners, and grand width of chest and well-sprung ribs which made him to the severest critic the nearest approach to the club's standard of excellence.

Then we had, next, Delaware, a type almost wholly distinct from Katerfelto, possessed of a grand well-wrinkled head, but a "long and low-to-ground" body, which made him faulty behind.

The third, Baron de Merley, was of an altogether different type, a nice compact dog, with the pear-shaped body so much desired, good legs and plenty of bone, but devoid of the turn-up of the under-jaw.

With these varying and divergent, yet all winning, types at one show, the old breeder as well as the novice may well ask himself, "What is the true type, since each win and win again?" How shall the judge decide when they are brought before him to contest for the "winners' prize"? Each individual judge has his own conception of the perfect dog, irrespective of what the standard calls for. No marked and emphatic improvement can or will be seen in this breed till the club sends forth its edict that the dog shall be judged by the standard adopted. If not, of what use is a standard?

The breed has come among us to stay, and if the club will insist on a standard the entries will rival those of the St. Bernards and fox terriers, now the largest classes at any of our shows. Only the club can bring order out of chaos.

The breed is growing marvelously in popularity day by day. In 1890 the Westminster Kennel Club had an entry of nineteen, in 1891 of fifty-one, with a gradual increase up to 1899, when it scored its phenomenal entry of one hundred and fifteen.

THE MONTH'S REVIEW.

By Caspar Whitney.

This is the season in which it is unlawful to kill or have in possession quail, grouse, or venison. Restaurants which serve this game are liable to legal prosecution and fine; and people who eat it abet the work of the game butchers and defeat the efforts sportsmen throughout the country are making to provide needful protection for our game birds and animals.

So also is this the time of year when sportsmen do not kill wild ducks.

Abstract Sportsmanship.

Perhaps nothing yields so large a return for a modest outlay as abstract sportsmanship. It's so right and honest and manly a thing to do, that it becomes very easy to voice indignant protest against the slaughter of birds and game in and out of season. And it must make a man feel a little more like a genuine Christian to note stirring within him a real sentiment against the wanton destruction of forest, animal and bird life, which God has put on the earth for beneficent purposes.

It does come natural (to the average man) to express sportsmanly views and to ignore them forthwith when the time comes for their use.

It costs so little to indulge in fine sentiments in the society of really good chaps and under the influence of an excellent cigar; it costs more—apparently too much, for a large percentage—to put them into practice.

Sportsmen so called may, it seems, be divided as follows: (1) those who are born with an ear attuned to the call of the Red Gods; and (2) those who catch its echo only. In one the response is from genuine love of the chase and with full respect for the rights of his quarry; in the other it is an acquired habit, with which he has no genuine sympathy. One fights fair at all times, and the other only when he is obliged to do so.

Spring Duck Shooting. I know a number of men who loudly declare in favor of game protection—who actually do some work in stopping the killing of grouse out of season—and yet who as regularly as the spring season arrives go duck shooting!

The fact that the spring season is the time when birds are mating and nest-

ing would seem sufficient to stay the destroying hand of a normal man.

And the sportsman is simply the normal man, who would as soon think of killing birds during their nesting period as he would of killing a doe or the female of any wild game, or of working a mare heavy with foal, or a bitch in pup. Sportsmanship is only a human—decent—instinct—nothing more; nothing less.

Some men excuse their spring duck shooting on the ground that the migratory habit of the fowl in that season makes killing more difficult than in the autumn, and therefore the bag smaller. But that argument reflects no credit upon the man. It is the breeding season just the same, and a time when the shotgun should be oiled and upon its rack—unless used at the clay pigeon trap.

The most abhorrent feature of spring shooting is the thought of killing a living thing during its mating time.

The present year has shown, perhaps more noticeably than any recent one, the gradual cultivation of a worthy sentiment on this subject of spring shooting. Looking back ten to fifteen years, the growth of sportsmanly conduct in this direction has been very great. True, the ducks have likewise diminished tremendously—owing to the great slaughter visited upon them—but taking all that into consideration, the spring shooter has decreased in most hopeful numbers: whereas he was formerly the rule, now he is the exception.

Uniform Laws and a Game License. Next to the development of the sportsmanly instinct what we need most is uniformity in game laws. Every spring brings us illustrations, and New Yorkers need look no farther than

the Niagara River, where, for lack of a fitting law, or law in keeping with the excellent one in force over the Canadian border, slaughter of ducks is an annual disgrace to our lax Legislature.

Niagara River furnishes breeding places for many varieties and large numbers of ducks; on the Canadian side they are thoroughly protected, while on the United States side they have no protection whatever. Thus it happens that this locality becomes a Mecca for the unsportsmanly of two nations.

In addition to stringent laws, the Canadians also patrol their side of the river, and require at all times a \$25 game license of every man possessing a gun. That is what we need in this country, in addition to game laws made with some reference to the conditions of adjacent States.

At present the laws differ so materially that in many cases they actually aid traffic in out-of-season game. In some States, for example, certain varieties of game may be sold long after the close of the shooting season in those States, provided the game thus sold comes from other States. This reads like a deliberate plan to aid illegal game-killing; but, of course, it is only crass stupidity of legislators in the first place, and indifference in the second.

At all events, it leaves the door wide open for the pot-hunters, and nullifies to a great extent the great efforts making continuously all over the country by sportsmen to protect our game.

The sale of game should stop when the season closes; in that way the incentive for killing would be removed, and greater protection secured.

We need very badly an annual congress of sportsmen in sections where uniformity of laws is feasible.

The Pot-Hunter's Friend. My attention has been recently called to a devilish device for the catching of game and fish which should be outlawed by every game protective association and anglers' club in the world. The thing is said to be a "sure catch fish-hook and animal trap," and goes by the name of "Old Glory" in the advertising columns of such papers as will give publicity to tackle so unsportsmanlike.

As an instrument of despatch in the hands of the market fishermen, I have no doubt this patent has its uses, but in

the hands of sportsmen it becomes a brand of shame, like unto the stigma left by the employment of dynamite and gangs of hooks fastened to a sunken lure. No more skill is required in its manipulation than is needed to throw a stick of dynamite into a trout stream. It is a killer pure and simple; a scheme to delight the hearts of those who revel in the slaughter of birds and fish.

It seems to me a most timely occasion for our several game protective leagues and associations to broaden their fields of usefulness by including vigorous prosecution of the purveyors of such pot-hunting contrivances. If sportsmen would threaten boycott to any dealer who kept for sale this trap under discussion, and associations expel any member using it, and black-list all those others who could not otherwise be reached, methinks something practical would be accomplished.

Talk Less and Work More. There is too much talk, very uninteresting talk at that, in most of these sportsmen's associations, and far too little action. The weakness of leagues lies in their becoming cut up into cliques, with individuals so assiduously seeking personal glory as to lose sight of the main purposes of organization.

There is not much personal glory to be achieved on a committee appointed to persuade tradespeople from handling unsportsmanlike machines for destroying animal and bird and fish life, but a tremendous amount of good would be accomplished in the cause of game protection.

Employment for the Fool-Killer. There is no "varmint" in the woods so meriting extermination as the unfeathered one on two legs, who, bedecked like a Frenchman on promenade, rushes thither at stated periods and hysterically pulls trigger at the very glimpse of any moving thing.

It would be deplorable enough in all conscience if the sufferers from this creature's blind shooting were always birds or deer, but every now and again it happens that a human, perhaps a companion, falls a victim to his unseeing eye.

Every season has its list of casualties—a considerable percentage of them mortal—due entirely to inexperience and heedlessness. Not half the men can

be trusted alone in the woods with a death-dealing weapon. A large number have only the most superficial acquaintance with either a gun or the conditions under which they find themselves, and an equal number are in a state of such constant and tremulous excitement that, if the gun was a double-ender, the fool-killer's mission would be accomplished out of hand.

But guns are not made that way, and so some other means of ridding the country of this kind of shooter must be devised. Here in New York a law has been prepared making the penalty of such criminal ignorance or carelessness—accidental shooting of a hunting companion—conviction of manslaughter in the second degree.

It's a good law, a just and much-needed one, and should be added to the penal code of every State in the Union.

Another Raid on the Adirondacks. It seems as though we shall never have flagged the last of the dangers which menace the preservation of our North Woods. So fast as one is made harmless another looms quite as formidable. Lumbermen, projectors of railroads, agents of trusts—ever lying in wait, like a parcel of harpies seeking an unguarded avenue and the propitious hour.

There is now before the Assembly of this State, a bill which has passed the Senate, and is numbered 783. On its face, it appears to have been drawn for the worthy purpose of providing, as it states, "a pure, wholesome, and ample supply of water for public and municipal use," by the establishment of reservoirs in the Adirondacks. But careful reading discloses further that the real purposes of the bill are to condemn lands along the Raquette River, and "to increase the average hydraulic power," by raising present dams and building others of even larger proportions.

In a word, it is proposed to raise and lower the level of the lakes as the pleasure and the commercial needs of the International Paper Company, who father this bill, command.

Flooding the woods would render even more difficult than it already is the work of preservation now going forward, while lowering the lakes would expose great stretches of land, covered with

noisome decomposing vegetable matter, just at the time when thousands of our citizens are seeking the Adirondacks for rest and health. It is for the Assembly to decide between the Paper Trust and the people. And at all events the Governor and the splendid commission he recently appointed will not suffer this damage to State property.

Forest Preservation in Canada. The belated efforts for the preservation of Canadian woodlands are happily meeting with greater reward than there was good reason to expect. And some more or less novel facts are developing which will be welcomed wherever the restoration of depleted forests is being undertaken.

It has been pretty generally believed to be the fact that pine forests once destroyed by fire are not by nature renewed, but are instead replaced by an inferior growth of white birch, poplar, balsam, and others of similar quality.

In northern Ontario, however, where great areas of pine timber lands have been destroyed by fire, a development in forestry is making which offers a solution not hitherto considered practicable in general application.

It seems that after a forest fire, a dense growth of birch springs up, but this, in turn, is followed in a couple of years by white pine and spruce, which grows in the shade of the deciduous trees.

This has proved happy news in Canada, as it will elsewhere.

Canada has suffered, perhaps, more than any other country in the matter of reckless destruction of timber. Stretches upon stretches have been made literally desolate by fire and the saw. The lumberman has laid waste enormous areas. One must have traveled the country and be familiar, at least in part, with its wooded districts, to realize how great the damage has been.

Strange enough, the farmer, who is one of the most implacable enemies of game protection in the United States, in Canada is, next to the lumberman, most active in the destruction of the forest.

What a dullard he must be—the farmer—not to perceive that, of all classes of workers, he suffers most from the destruction of game and forests!

**Song Bird
Protection
and
Sentimentality.**

The appearance in a New York morning newspaper of a statement from a "fancy feather worker" that "it is a mistaken idea to suppose that song-birds are killed for the purpose of supplying feathers to be made up for millinery purposes," would not be given a serious thought, had it not furnished text in the same paper for an editorial more culpable in ignorance than the unlettered communication of the interested wage-earner.

It does not require statistics, or the lore of a scientist to refute such statements. Every man and woman who walks the streets with opened eyes recognizes its falsity.

Song and other wild birds (not game) are killed—thousands upon thousands of them—by the agents of milliners. There is on Long Island alone an agent whose establishment any one may visit, and who kills thousands of gulls and terns annually to supply the milliners' demands.

But it's absurd to argue the question. The facts are too patent. I might as well enter upon elaborate argument to prove politics corrupt.

It is true that the feathers of chickens, turkeys, pigeons, and other birds killed primarily for food, are used by milliners, to some extent; and if Senator Hoar's bill prohibiting the use of song-bird plumage for the decoration of women's hats become a law—as it very likely will—the less brilliant feathers will have to be used exclusively.

The talk about depriving fancy feather workers of employment is maudlin sentimentality. Such matters adjust themselves. If song-birds are not to be had, chicken feathers and American ingenuity will take their place.

**Another
America's Cup
Challenge.** After much correspondence and some cabled denials, it seems to be finally settled that Sir Thomas Lipton will again challenge for the *America's Cup*, and that the race will be brought off next year despite the Glasgow fair.

This being determined upon we may count with considerable confidence on a more exciting struggle in 1901 than we had in 1899, although there appeared to be quite excitement enough for the faint-hearted during those first few indecisive and exasperating days of drifting in last year's contest.

Sir Thomas is a shrewd, keen-witted business man by nature, and a yachtsman by adoption, which, in his case, has no harmful effect on the sailing of his boats, because he is wise enough to put them in charge of competent commanders, and keep himself out of sight. His interest in yachting is entirely subordinated to his desire to win the *America's Cup*, which he knows would make him quite the first man in England next to General Roberts. Therefore, it is certain that the next yachting campaign will be laid on most carefully planned lines, and carried out by the best talent regardless of expense.

**Lipton's
Disturbing
Dilemma.**

Some indication of the determined effort intending is already given by Sir Thomas' asking the privilege from the New York Yacht Club of choosing finally to race with the better of two trial yachts. Dunraven asked for and was granted permission to sail his best available boat, but Lipton's idea of bringing two yachts to America and choosing the faster after thorough testing in these waters is something never before attempted, and means such an effort for the cup as has not yet been made.

From all accounts Watson is to design the new boat, and Fife is to alter *Shamrock* as may be suggested by his experience.

This sounds formidable, surely, but *Shamrock* presents a disturbing dilemma, which must make even so bold an operator as Sir Thomas hesitate. Certainly those bows of *Shamrock* must be altered if she is to sail faster; but, on the other hand, if *Shamrock* undergoes alteration, how much will it affect her speed? Suppose the new Watson boat beats the remodeled *Shamrock*—how is Sir Thomas to tell how much better than the *Shamrock* which was beaten by *Columbia*, is the new cup challenger which—in thirty miles—has sailed say, five minutes faster than the altered *Shamrock*?

**Intelligence
in
Rowing.**

Never has there been a rowing outlook at Harvard to equal that of this year. In quantity, quality, and in spirit, boating is on a basis which a few years ago would have been thought scarcely possible. And the chief agents to this end have been Lehmann, Storrow, and a victory which came to give confidence just at the needed hour. Rudolf Leh-

mann implanted the proper spirit and elementary rowing principles, and E. C. Storrow continued the spirit and worked out a stroke which in '99 defeated a Yale crew, whose time was somewhat faster than that of the average winning eight at New London.

Let this be remembered when university boating is under discussion. Lehmann in '97 induced Harvard to abandon class rowing, and to adopt the club system by which all men who chose to offer themselves would receive the best the university had to give in the way of coaching. Thus was introduced the survival of the fittest system which resulted last year in the best oarsmen of Harvard representing the university—a simple and an intelligent procedure that makes for more crews, a uniform stroke, and a boating spirit, in all of which particulars American university rowing has hitherto been sadly lacking.

Yale is working toward this club system, and so must eventually all who seek highest boating honors.

One (Stroke) For All and All For One. With an intelligent working system which starts all candidates from an even mark, rowing is certain to undergo some very healthful and profitable changes. Chief of these will be its popularization, which in turn may lead finally to what some of us have long sought, viz., an annual university regatta, patterned after Henley.

At all events, the new order means, for those who accept it, an end of all old-time monotonous training, and dozens of candidates where formerly there was one.

It means, too, relief from that persistent bore, the man with a theoretical stroke. The day is coming speedily when there will be but one stroke, although the details may be varied slightly at different colleges; and the one stroke of the future must be that in use to-day at Harvard, Yale, Wisconsin, and Cornell.

Courtney was the first coach to have his eyes opened (in 1895) to the rational method of rowing. Cornellians insist their stroke has undergone no change—an amazing claim in view of the practical illustration before us. Then followed Robert Cook, of Yale, and last year his methods were improved by Dr. Gallaudet. For a long time O'Dea (Wisconsin) was said to be teaching

what was called the Yarra-yarra stroke, and when the thing was seen on the Hudson it was recognized as the same that Mr. Cook had learned in the early seventies, had forgotten in the eighties and early nineties, and recalled in '96.

Lehmann gave Harvard the rudiments of its present stroke, and now these four universities have one differing only in minor details.

At each institution it has the same essentials—a long reach forward and aft; a hard, firm catch, held throughout the stroke; the water caught and let go squarely; a hard leg drive in combination with a strong body heave; a slow and even recover with the bodies; the arms used as connecting rods between the oars and source of power—the legs and bodies; a good body swing, with the slides used as auxiliary and not in place of the swing.

Experimenting at Columbia. The announcement made that Columbia's stroke is to undergo another modification this year, and I am sincere in wishing that it may prove more profitable than several others which have preceded. Yet the direction in which the experiment is to be made creates some doubt of its possible value. It is said that the new system includes beginning the recover sharply and slowing it down gradually so as to prevent stoppage of the boat's progress between strokes.

Now that is rather a neat theory, and it worked out fairly well as applied at Yale by Mr. Cook before Harvard learned how to row correctly. But it was discarded by Mr. Cook's successors last year in favor of the more practical idea that the acquisition of a good hard drive is of far more importance than the elimination of a little slowing between strokes. It has also been learned by long and trying experience that it is well worth while, in a four-mile race, giving the men a chance to recover their breath and poise between strokes, instead of increasing their efforts.

Hitherto the distance separating Columbia's crew from the winners has seemed to increase in almost geometrical ratio with the annual modifications of rowing theories. Perhaps the approaching training season will demonstrate the wisdom of following in Harvard's rowing footsteps. It will be well for Columbia if it does.

No Rest for the Weary. Just when the outlook appears comforting, something seems always to be turning up to emphasize the need of unrelaxed vigilance on the part of those who would have the spirit, as well as the letter, of the amateur law enforced in the Middle West.

Several things have happened to suggest this thought, and not the latest instance by any means, though the one best suited to my present purpose, is Cunningham's post-graduate career at Michigan.

This man had been the center rush on Michigan's eleven for three years, was graduated in June, 1899, and returned in the autumn with the announced intention of taking post-graduate work. Not long after the close of the football season he left college, and is now practicing medicine.

Now, it is a fact that the President of the Michigan Board of Control—Professor A. H. Pattengill, one of the most active of those safeguarding Middle-Western athletics—made especial investigation so soon as Cunningham returned. But no irregularity was to be discovered. The rules clearly permitted him to play, and he asserted his status as a bona fide student for the year.

So he played, as said, and departed from the university immediately on the close of the football season, marring an otherwise sportsmanly record, and leaving the conviction behind that someone concerned with Michigan's athletics, and supposed to be honest, was not.

Salaried Managers. It is impossible longer to escape the conviction that the present system in the Middle West, of putting the managerial control of collegiate athletics into the hands of salaried men, and thus making their positions dependent, to an extent, upon the success of their teams year by year, has a professionalizing tendency.

There can be no doubt of it. I have been studying the question closely for the last two years, until my opinion amounts to conviction too strong not to be uttered.

It is equally true that Chicago's importation of coacher A. A. Stagg led to the adoption by the other universities of the salaried manager system. It began simply as a protective measure, and

has spread and developed to keep pace with the multiple capacities in which Stagg has served his employer.

At Chicago Stagg combines the functions of coacher, legislator, and manager. In the deliberations of the Chicago University Board of Control, he is, as near as may be judged, supreme; his word in athletics is apparently law with the Chicago faculty; and when the annual faculty conference of all the colleges is held, there we find Mr. Stagg side by side with the professors from the other universities, whose athletic duties end in the legislative hall.

We can scarcely find fault with these professors if they express doubt as to the precise capacity in which Mr. Stagg presents himself—whether as coacher, financial manager of Chicago athletics, or legislator in the interest of all the Middle Western colleges.

The Harmful Result of Example. This is intended as no criticism of Stagg, or to say that the Chicago University has no right to engage on salary one who combines the qualities of manager, coacher, legislator, financial agent, and all the rest of it; but it is to say that the example set by Chicago is responsible for the growth of the present paid graduate manager system in the Middle West, and for the paying of more money than ever before to coachers at Wisconsin, Michigan, and other college centers.

Be it understood that the graduate manager in the West differs from the graduate manager of the East, in that the former has direct control of the teams, as well as of the finances, while the latter has to do only with the finances, and literally has nothing to do with the personnel of the team. He fills a really much-needed and most valuable office in the business department of college athletics.

There is no doubt that the system as pursued in the Middle West is a menace to the health of college sport. The Cunningham case, and others which have been brought to light at Chicago and Wisconsin prove that the temptation of salaried men, with positions at stake, to strengthen their teams at the expense of their ethics is usually too strong to be withstood.

Let there be paid coachers, so long as the need be, but the manager, the man who is answerable to his university for

the *bona fides* of the team—let him, like the captain, be annually chosen by the undergraduates, and, with the members of the team, find his reward in honorably contending for victory.

Indifferent League Hockey. The season, which closed early in the month with the first visit to New York of the Ottawa and the McGill University teams, gave little satisfaction to the devotees of this most excellent game. Comparison with the Canadians showed the native club form to have made no progress beyond where it ended last year, even the work of the champion Crescent seven being below that which carried them to victory in 1898-9—the Crescent team of 1900 being virtually the Brooklyn team of '99 relabelled.

In no department of play was revealed any gain in quality—not in speed, dodging, dribbling, lifting, passing or shooting. So, too, in the defensive—no improvement was observed; body checking was not more skilful, only in some instances more vicious. Other methods of intercepting either player or puck were about equal in performance to past seasons. As for goal keeping, it is a question if, with the exception of Smith of Yale, this part of the defense has not deteriorated somewhat.

Vicious Play and Officials Complacent. Great, however, as is the present popularity of hockey, it is certain to lose caste unless the distasteful hoodlum play—so frequently in evidence—is completely cut out of the game. It is not that the game in the past season was characterized by rough work, but by inexcusable viciousness, by, to be colloquial and distinctly correct, “dirty” work of the filthiest nature—work which included violent tripping, kicking, gouging in the stomach with the hockey stick, and other features of a similar character.

It is not my habit to write indirectly and I do not intend to be misunderstood now. There is a certain amount of roughness in vigorous play which is wholesome; personal injury is a chance which every man takes, who engages in any sport worth the while. But no language is too strong to condemn men who play foul.

Hundreds of trustworthy observers could testify to instances in Amateur Hockey League games of deliberate and

reckless attacks upon opposing players. Dobby openly and Wall more slyly have frequently offended, and to a less degree have also Drakeley (all of the Crescents), and Russell (Hockey Club), and Baird (New York).

All these men should have been put out of the game, but the officials were stupid and complacent. A sportsman has no relish for victory won by foully crippling his antagonist.

It is gratifying to add that some of the best players combined sportsmanship and skill, without lowering the standard of either.

University Hockey Development. One of the most satisfactory features of the recent season, was the development of a strong team at Harvard and the beginning of the game at Princeton. Harvard has been playing for several years under discouraging conditions, sometimes suffering heavy defeats by Brown or Boston Tech, but the courage and enthusiasm of Goodridge and his mates have at last been rewarded by the production of a team little if any below the standard set by Yale.

Princeton must not be discouraged by its comparatively poor showing, but rather take heart of the example set by first Yale and recently by Harvard.

It is well for a university to have more than one or two strings to its bow, and the tendency at Princeton is toward too few games. More games are wanted at all our universities, and especially such grand games as hockey, lacrosse, Association football. The hockey development is most gratifying, especially at the smaller institutions like Swarthmore and Haverford, and there is no good reason why all our Northern colleges should not next season be represented by teams.

Professional Schoolboy Athletes. There is nothing causing friends of wholesome amateur sport so much present anxiety as the professionalizing and dishonest element which seems to be spreading among schools, especially among metropolitan schools. And I marvel at the indifference with which fathers and brothers view frequent disclosures of unclean athletics.

What are fathers thinking of to tolerate the growth of a spirit which so seriously affects boys at the very age when their characters are forming and they are most susceptible to influence! Is

dishonesty to be the less condemned in athletics than in cards or in business?

Is it not the boy taught at home to abhor lying who develops into the man whom the world respects?

Are there any fathers of average intelligence who do not realize that the playground has more to do in the formation of a boy's character than almost any other influence that comes into his young life? The father who is not deeply concerned in the ethical character of his son's play is not fitted for the responsibilities of parentage.

Along with the great good which has accrued from the athletic development of young America have also come evils which must be challenged promptly and corrected or killed. None of these is so harmful to the boy or bears so portentously upon college sport and upon our athletic future generally as the practice, apparently too common in New York schools, of offering inducements to boys of unusual athletic ability.

Unprincipled

Principals.

Now it would seem that the head masters of these schools might be depended upon to safeguard the morals of their scholars. But it is a shocking fact that the head masters in many instances have actually been the prime movers in the dishonesty. Boys who have gained some little reputation at one or another athletic game, have been deliberately sought and offered free tuition, and, in some cases, other inducements, to attend certain schools. In many cases their class-room work has been merest sham. There has been indeed a veritable traffic in athletic scholarships, so-called—one of the names under which free tuition in exchange for athletic representation is given.

Miserably enough all this deception has been possible because, according to interscholastic rules, the certificate of the head master as to the *bona fides* of a school-boy athlete was accepted as final and without further question!

There are several head masters here in New York, who, while preaching purity, have been practicing methods so unclean as to make them obnoxious in the sight of wholesome-minded men. And these shall find exposure unless I note honest intention in the recent public promise of reform.

The Interscholastic Association of New York has recently ruled that boys

having scholarships are not eligible for athletics. The idea of such a state of affairs ever having been tolerated is too amazing for speech! Trinity School, whose head master, August Ullman, believes in athletic scholarships, has therefore resigned from the Association, which is a good thing for interscholastic athletics. It will be well for De La Salle, Berkeley, and others, to bring all their influence to bear upon clearing the present tainted atmosphere.

Athletic Recruiting
at Prep. Schools.

This brings to mind the habit—also growing altogether too much for health—prevalent at universities, and particularly among enthusiastic alumni, of annually canvassing the preparatory school athletes for prospective Freshmen. There are legitimate ways in which the trend of a boy's inclinations, so far as college entrance goes, may be sounded, but issuing campaign literature is neither permissible nor in keeping with wholesome sport.

I am greatly surprised at a circular letter which Harvard's football manager has been sending to the schools. It is at variance with Harvard's published sentiments, and should have the official attention of that university's Athletic Committee.

Another offender requiring attention is the schoolboy athletic rounder. I have one in mind who within three years has represented as many different institutions. Alumni who "interest" themselves in these schoolboy athletes are breeding the most malignant form of a professional spirit. And there is nothing so vital to the healthful life of college sport as purity in interscholastic athletics.

Muckerish
College
Baseball.

The muckerish spirit of play which, unchecked by faculty committees, had been developing in college baseball for several years, culminated last season in some of the most offensive exhibitions it has been my misfortune to witness.

Not the smallest excuse was given; hardly, indeed, the pretence of "accident" offered. It was deliberate and malicious fouling.

Added to this was the other somewhat slighter offence of hoodlum coaching, intended to disconcert the opponents, which assumed varied forms at the several universities. At Princeton it took the peculiarly offensive nature of every

man in the field yapping continuously and simultaneously; at Yale a solitary voice, in Bowery accents, smote upon and irritated the spectator's ears; Harvard's offense was more in actions than in words, and hence, perhaps, the greatest.

All this can be stopped, if the proper university authorities have the mind to do so, and set about it fearlessly. The faculty and Athletic Committees are prone to shirk disagreeable duty by professing lack of power. Their power is unlimited. Harvard's Athletic Committee, had it so wished, could have expelled from the nine those members whose '99 play merited that kind of treatment; Princeton's committee had equal power.

Such action would, of course, have lessened the winning chances of the nines, and it seems that Athletic Committees, however much they may protest to the contrary, are not always proof against the allurements of possible victory.

Where ethics and victory making run counter, ethics usually suffer.

Closing the Spigot. With a great show of virtue a few years ago some of the universities forbade their nines playing with professional teams in the practice work before the opening of the college season. The reason was given that play with professional teams is apt to lead to the acquirement of professional habits, which was more or less true, so far as it goes, but somewhat amusing in the face of an immediate increase of professional coaches.

There is no doubt that college baseball has been growing more and more offensive year by year, due (1) to the indifference of college faculties and Athletic Committees to "muckerism"; (2) to the employment of professional ball players as coaches; (3) to the game, as presently conducted, apparently appealing to a distinctly lower type of intelligence.

Whether the quality is in the player originally, or the game develops it, I cannot say, but certainly baseball appears to bring muckerish tendencies to the surface.

If something is not done to check this spirit, college baseball will go the way of the professional game; already it is in disgrace. If the university authorities will penalize with expulsion from the nine all men who, by voice and action, conduct themselves like rowdies, instead

of like sportsmen, we shall get back to the proper plane.

International Revolver Match. Until within a couple of weeks it looked much as if the talked-of revolver match between American and French teams would end in a series of paper challenges between two shooting-gallery proprietors; but a real challenge has finally eventuated, and its only objectionable feature appears to be a one-hundred-dollar cash prize which the French gallery proprietor has added.

Meantime a Revolver Association has been organized with Dr. Reginald H. Sayre as president, and invitations have been extended to every pistol-shot in this country to enter the forthcoming trial matches, in order to determine upon a team which will be really representative, and composed of literally the best shots in America. The challenge is for sixty shots, half to be fired at the French distance (52½ feet) and French target, which has a 1⅛ inch bull's-eye, and half to be fired at the American standard target, with its 2⅞-inch bull, at fifty yards.

The most important result of this international revolver-shooting flurry will be the building of a record gallery in this city, something which to this day has never existed, though some first-class shooting has been done at ten to twenty yards. Our chances of victory are not very roseate in this international match; There are in France many more first-class gallery shots than in America, chiefly for the reason that they do more indoor shooting than we do, and therefore have better galleries. The American, however, is a natural revolver and rifle shot, and given the proper practice, has set the standard for the world. Perhaps he may even now do so in gallery shooting, in which his practice has hitherto been limited.

Amateur Baseball League. Talk is rife of several athletic clubs organizing to revive amateur baseball in the Middle States. As the athletic clubs in the Middle States killed amateur baseball some years ago, it is eminently just that they should now be instrumental in giving it new life. But it must indeed be a new life, and not mere revival of the dead.

The old league collapsed, and club amateur baseball died in this vicinity half a dozen years ago, because it had become saturated with professionalism.

An openly paid pitcher and then battery were the entering wedges which led to the covert paying of other men, until corruption spread in the teams, and eventually throughout the entire league.

Finally, it went to pieces, as had happened many times before when professionals masqueraded as amateurs—as will always happen wherever dishonesty creeps into any kind of sport.

I wish the new league long life and prosperity, but unless it intends to hold, without deviation, to the strict letter of the amateur law, it will, as surely as the sun shines, go the way of its predecessor.

Horse-Racing and Farming.

Though the reputation and the popularity of horse-racing have been greatly damaged through control of the tracks by the gambling element and by the too frequent indifference of owners to dishonest riding, yet there is no doubt that the license system has not only cleared the atmosphere to some extent, but proved valuable to State agricultural societies, which are the beneficiaries of the tax.

Convincing proof of this is furnished by the recent report of the commissioners—Messrs. August Belmont, Edwin D. Morgan, and John Sanford—which shows that whereas the amount turned over to the societies was twenty-five thousand dollars in 1895—the first year of taxation—in 1899 it had grown to nearly ninety-one thousand, making a total in five years of over three hundred and ten thousand dollars, which has gone to benefit New York State agricultural interests. Meantime there is some slight improvement in the tone of racing, but too little to give much hope of it soon being rescued from the gamblers—to whom surrender was made long ago.

America at the Paris Games.

While the teams to be sent over have not yet been definitely decided upon, enough is known to give assurance that, come what may, an overwhelming majority of athletic honors will fall to Americans.

Indeed it looks as though the remarkable collection of athletes which will represent "Pennsylvania past and present," will alone be quite equal to sweeping the field not only at Paris but also in England at the British championships.

Except in the quarter and half-mile and distance runs, there seems to be

no one (amateur) wearing spiked shoes in Europe, that can beat a Pennsylvania entry. Adding Cregan, of Princeton, the only other college now sure of sending over a team, to the American forces abroad, and there is given the additional chance which amounts to almost a surety of capturing the half-mile. The quarter, and perhaps the three miles, really seem about the only track events on a long programme, which American athletes will not win at Paris, and there is a good fighting chance for even those. In the field events the outlook is similar.

There will be no athlete of English or other nationality who can beat Tewksbury in the sprints, Cregan in the half-mile, Orton in the mile, Kraenzlein in the hurdles and broad jump, McCracken in the weights. Serviss in the high jump has also a good chance.

French Government as an Athletic Manager.

Let it be distinctly understood that these are not the Olympian Games, as incorrectly they have been heralded by newspaper reporters. There are to be no Olympian sports this year. The Paris games are co-jointly the enterprise of the Paris Exposition Company and the French Government—neither of whom has had any previous experience in athletic management.

Some idea of the capability of that management may perhaps be gathered from the fact that work has not yet begun on the running path, although it will be the first cinder track France has ever attempted to build.

The elaborate programmes recently distributed are instructive, too, as to the ethical standard likely to prevail. For example, I observe the gymnastic contests will be open to all except "professionals who have exhibited in public circuses or in theatres"! I note also that elaborate plans are making for an amateur rowing regatta, and scores of home entries are announced—when I was in Paris in '98 I found about ninety per cent. of the French oarsmen believing in racing for money prizes.

So far as he is permitted to do so, Baron Pierre de Coubertin, chairman of the set-aside Olympian Games International Committee, may be counted upon to guide the Exposition people, but his voice is apt to be drowned in the ignorant babel of Exposition and

Government committeemen. As a huge picnic the affair will no doubt have its uses, but there is certain to be all the accompaniments to games of that character—poor tracks, unreliable measurements, questionable amateurs, and much subsequent confusion of status.

Polo Abroad. The Parisian fever has seized also upon polo, but the attack appears so mild it may pass before genuine symptoms are really developed. Annually for several years, those fortunate players whose serious toil is killing time pleasantly, have talked of an American team visiting England—annually it has been found impossible to get together in London four Americans with whom the credit of the American game could be risked.

This year with the prospect of Messrs. Foxhall Keene, J. E. Cowdin, L. and J. M. (Jr.) Waterbury attending the Paris Exposition, the long-cherished plan seemed likely to be realized, because these four make perhaps the strongest team America could organize. But again disappointment is threatening, for L. Waterbury, and probably Cowdin, cannot be counted upon. However, there may be polo of an international character, if two others can be found to join Keene and J. M. Waterbury, Jr., in Paris and in London.

There would be no doubt as to the outcome of a game between French and American teams, but at Hurlingham none but the best four we could muster would have a chance of recovering the Challenge Cup, which Captain J. W. Watson's team won from us at Newport in 1886. Since that time American and English polo teams have never met, and as our form has immeasurably improved, it would be too bad if we were not strongly represented on the next trial, whenever or wherever it may be. If Mr. Keene captains a team we may depend on its being a strong one.

Polo at Home. At all events there will be no lack of play on this side. The Association is beginning with a long list of fixtures, and several new clubs, the most important among which are Saratoga and one organized in Squadron A, that will share the field of the Rockaway Club.

The introduction of the game in our volunteer cavalry is an excellent idea, and should be generally adopted.

In England and in India, wherever

English cavalry is stationed, polo flourishes. I have always wondered why the game has no greater vogue in the American service.

There will undoubtedly be some official separation this year of the classes, so the contests may be more even, and therefore the more interesting. Last season drew some convincing object-lessons with respect to this required division. It also showed the need for legislation to fit the renegade players.

American polo stands more in want of club loyalty than of any single element. The spirit apparent on almost every side makes for the individual—not for the club. No game can attain its proper development with such feeling running riot among its devotees.

The sportsmanship of the cock-pit yields no nourishment.

English Athletes Coming. Meantime while American athletes are preparing for a European invasion, there is some talk of an English combination cricket-football (Association) team and some lawn-tennis experts visiting us. N. L. Jackson, former editor of *Lawn Tennis*, is responsible for the football and cricket end of the scheme, which I doubt being really carried out. Football of any kind in midsummer is, of course, impossible in this country and Association fifteens are so few, one must hunt carefully to find them at any season. Moreover, only cricket elevens of the first class can make a visit to America successful from any view-point. Nothing can be accomplished in a cricket campaign over here without the endorsement of Philadelphia—the game's American stronghold.

And even Philadelphia has wearied of paying the touring expenses of itinerant British cricketers.

There is a possibility, however, that we may have over some of the lawn tennis' first class—Mahony, who has gone off in his play considerably; R. F. and H. L. Doherty, who are at the very top; R. F. in singles, and the brothers in doubles. They may enter for the recently offered international trophy, and a tournament result on St. George's grounds, Hoboken, N. J.

These failing, there will be no meeting of American and English athletes on American soil, for the Oxford-Cambridge-Harvard-Yale return meeting is certainly abandoned for 1900.

**Promising
Racquet
and
Tennis
Material.**

Although the national championship for 1900 in both racquets and court tennis has been won by an Englishman, Eustace H. Miles, yet the season showed more promise of an eventual native first-class than I remember any previous series of tournaments to have disclosed. We have yet much improvement to make ere the American average is carried to the English level, but at all events we are progressing.

Incidentally, it is interesting to record that more men play both games on this side than in England. Messrs. L. M. Stockton, Richmond Fearing, Austin Potter, J. Crane, Jr., Payne Whitney, Clarence Mackay, W. B. Dinsmore, Morton Paton, and O. S. Campbell are all good examples for America, while in England only Messrs. Percy Ashworth, E. H. Miles, A. J. Webbe, H. Vernon, H. S. Mahony, and H. Nesbit are first-class at both games.

The New York Club racquet tournament developed some very interesting play. Among other things it persuaded me that Clarence Mackay at present ranks next to Q. A. Shaw, Jr., which means he is the second best among native players. If he continues improving and keeps fit, he will pass the Bostonian, who is too unsteady to make the most of his natural ability. With more match playing and greater variety in the pace and placing of his strokes Mackay will be a very formidable opponent. He has excellent form and abundant grit.

J. S. Hoyt made perhaps the next best showing, but his style is a little too correct. Racquets is too fast a game to give a man time always to adjust himself in ideal manner for every stroke. One must have lightning adaptability.

Payne Whitney, though defeated by Hoyt, beat W. B. Dinsmore by sheer persistency. Whitney has little style, is not quick on his feet, and his back hand is weak, but he is bound to develop, for he has two strong points in his favor—physical endurance and pertinacity. His service is at least equal to Mackay's and has more pace.

Dinsmore should be Mackay's equal; he has an excellent eye and volleys best of the lot. But he is too careless in his stroke and seems never to pull himself together until too late. Mackay and Whitney are the real match players of

them all, and the ones certain to develop equal to the best.

Even with L. M. Stockton at his very top game E. H. Miles could beat him at tennis, but the great ease with which the Englishman accomplished the other's defeat for the national championship must be explained by the poor quality of Stockton's game. He showed little better than second class—and, for one reason or another, has gone off in his play.

A coming man is O. S. Campbell, who is beginning to understand the use of the side walls; his volleying and activity give him great advantage.

**New Knockabout
Rules.**

The adoption by the Long Island Sound Yacht Racing Union of the rules of the Knockabout Association of Massachusetts again suggests the thought that there should be some definite agreement among yachting clubs and associations to put no rules on record without the provision that they remain in force for a given period—say, three years.

In the main these knockabout rules are to be desired, and are wise except for the requirement that a boat and equipment shall weigh 5,900 pounds. If this is to be interpreted as meaning that a boat must be actually weighed, it is a needless and foolish rule. In the first place, to comply with it would cost about twenty-five dollars on every occasion, and, secondly, to sling and hoist a full-rigged boat out of the water is a delicate undertaking, and fraught with danger to the yacht. A certificate of weight from a reputable designer ought to be sufficient, and I am confident the Larchmont Club, which usually combines common sense with its official mandates, will so consider.

Under the new rules, the old boats are at a considerable disadvantage. For instance, under the 1900 rule the race-about or knockabout can be twenty-one feet load water-line, without crew aboard; last year measurement was taken with the crew aboard; therefore the 1900 boat has an advantage of four or five inches. Again, this year's rule does not require a cabin-house, and there is no limit to draught; draught was restricted to five feet last year, and every boat compelled to carry a cabin-house.

**Restricted
Classes.** It certainly seems true that rules which so radically change within a year are harmful to the sport, because a majority of racing

men cannot afford to keep pace with whimsical legislators.

Restricted classes are unquestionably desirable, but not where restriction means one design and one builder.

The most successful and sport-giving class of racers we have had in recent years were the thirty-footers, a class restricted as to dimensions but not as to designers, although it happens that the fastest of its members came from the same designer and builder. The Seawanhaka class of one design, one builder knockabouts were not successful, despite the large number of boats ordered and sailed.

Small-yacht racing requires stable rules and boats from any designer who complies with required restrictions.

This is sportsmanlike, and makes the best racing.

Great Expectations. The Automobile Club held a meeting in New York one night this month, and when its members had dined, they talked largely of a one-hundred-foot highway, to be constructed from the Atlantic to the Pacific coast. The expense of building this great thoroughfare, the automobilists decided, is to be borne two-thirds by the State and the National Government, and one-third by the farmers en route.

Farmers will no doubt rejoice at the opportunity thus afforded to so simply dispose of their accumulated cash surplus.

I think I hear them rejoicing!

As it costs about \$8,000 a mile to build a sixteen-foot macadamized road, and

the proposed boulevard would cost something like \$45,000 a mile—it is easy to discern the especial reason for the farmers' joy.

The Automobile Club would better guess again. The most practical thing automobilists can do for road-building is to join the League of American Wheelmen in its splendid pathmaking campaign.

If ever a one-hundred-foot highway is built across the continent it must be done at the expense of States traversed. The farmer will contribute all he can afford in granting a right of way through his land.

Sectional Golf. Perhaps the most satisfying feature of the opening golf season is the obvious development of the spirit of inter-club and inter-city competition. Boston is coming to St. Andrews; New York is going to Philadelphia, and there are a considerable number of other matches of less importance already arranged for.

This is very desirable, and makes strongly for the upbuilding of sectional championships, which in turn shall raise the national standard of play. It is one of the best signs of the opening season of 1900.

The first tournaments have shown Mr. W. J. Travis to have lost none of his match-playing quality, while his skill has bettered perhaps a shade. He began his 1900 season with a victory over Findlay Douglas.

Mr. Herbert Harriman, the champion, began his season playing indifferently.

THE UNIVERSITY ATHLETIC OUTLOOK.

IMPROVED CONDITIONS AT HARVARD.

TRACK ATHLETICS.

THE track candidates were able to go out-of-doors nine days earlier this year than last, and the result is apparent in the general excellence of several men in most of the events.

No new men have shown great promise in the quarter mile, so that Harvard will probably be weak in the event.

Hallowell, it seems, must do most of the work in the hurdles, Harvard's erstwhile strongest events; since Converse, who was regarded a sure point-winner in the dual games, will probably not run, owing to a last-summer injury.

The most prominent of the two-milers—Foote, Richardson, and Blakemore—are ex-

amples of what persistent work will accomplish. All three began working with the track team when they first came to college, and are now for the first time considered factors in the dual games. They are making good time.

The developing work has been chiefly with the new candidates, the old men having scarcely got into harness during early April.

BASEBALL.

Harvard must accomplish a great deal to obtain this year a foremost position on the diamond. Although the '99 Yale series was won, the work of last season was hardly satisfactory. In the two games with Princeton, Harvard scored but four runs, to something over twenty for the opponents, and the year's

record showed eighteen victories and eleven defeats.

Of the '99 team, four remain: Captain Reid, catcher; Fincke, second base; G. C. Clark, third; and Laughlin, centre. These are all well-seasoned players, who, while not brilliant, yet collectively form a promising nucleus. It is probable that all four will be found in the same positions they filled last year. Clark, who had some school experience in pitching, began with the battery candidates this year, but his arm soon went back on him, so it is impossible to say what he can do in the box.

No doubt relief is felt by the coaches at not being obliged to handle two such pitchers as Harvard had last year, Morse and Fitz, both brilliant at times, but undependable. Coburn and MacDonald are still in college, but the former seems to have come to a standstill, while the latter, though possessed of excellent control, is so short, both in trunk and arm, that his usefulness is quite limited.

The chief hope, therefore, is in developing two freshmen, Stillman and Kernan, both of whom are strong, and have particularly good arms. Already they have fair control and offer encouragement of attaining considerable skill.

Reid will do all the catching, and if he does not overwork should surpass last year's record, especially in batting. Thus far, certainly, he has handled his men exceptionally well, disclosing more judgment than is usual with undergraduate captains. The preliminary indoor work of the candidates was very thorough.

Between J. D. Clark and Kendall, the other candidate, Harvard should have a good first baseman.

Either E. H. George, formerly of Wesleyan, Keene, or Coolidge should fill the other vacant position in the infield. George is the only seasoned player, but he is not Coolidge's equal in fielding, nor is he as fast and conscientious as Keene.

The two vacant outfield positions should give competition well along in the season to Wendell, Jaynes and Stewart. The first is primarily a catcher, but as he has batting ability he may find a place in the outfield.

On the whole, Harvard has some of the fastest and most energetic material in years. There is a dearth of first-rate pitchers, but it seems as if this nine would excel last year's in skill as well as in character of game. At the first meeting of candidates Captain Reid announced that Harvard wanted a team that played hard, but that it must first of all play a clean game.

ROWING.

The impressive feature of the boating situation at Harvard this season is the large num-

ber of men who are really rowing very well, in contradistinction to the excellence of a few men—as formerly was the case. Nothing like the present rowing spirit has ever been seen at Harvard, or even at Cornell—which has always devoted its best energy to its crews.

There are eight eights from the Law School, and three from the upper classes, rowing every day from the Newell boat-house, not to mention a half dozen Freshman eights from the same club, and about the same number putting out from the Weld.

This makes something like thirty eights to be seen with more or less regularity on the Charles River, besides the singles and pairs, which are likewise increasing in numbers.

Mr. E. C. Storrow is on the river daily, assisted by several graduate coaches (who are not nearly enough, however, to supply the demand); and the two professionals, Donovan (Weld) and Vail (Newell) patrol the river, continuously coaching. Thus the humble, spasmodic efforts of the unlearned single scullers and of the less venturesome novices are not allowed to be wasted. In fact, every man on the river is encouraged and instructed.

Of last year's winning 'varsity, every man is back and eligible and a candidate for the 1900 boat. How many of them will make it cannot so early be even surmised, for among the candidates are all of the '99 Freshmen, among whom there is some high-class material, and a number of very promising men in the various club boats.

The Freshmen, too, are a rather promising lot, and in physique average fairly high.

In a word, the average work of the crews for this time of the year is distinctly high.

ALTERED SYSTEMS AT YALE.

TRACK ATHLETICS.

The marked feature of the early season has been the distinct holding back of individual development and the evident intention of avoiding the mistake of last season, that sent to the Philadelphia Relay races a set of men equipped and conditioned for final championships, with the net result that never, thereafter, during the entire season, was the university able to show the true quality of these runners.

Of new and promising men, Thomas, as a hurdler, seems likely. He has the build and the make-up for speed over the sticks—possibly more for the low than the high ones, however. Duval, in the high jumps, is also a good coming man. That excellent football tackle, Stillman, is a candidate of much promise in the hammer, and once he gets the knack of it he should attain considerable skill.

Much interest is centring about the question of whether Adams, the half-miler, will run this year. Whether the trouble lies in the flesh or in the spirit will not matter if Yale does not have him. I expect, however, to see him on the mark in the dual games. Adams could have been made to run faster than he did. His trainers call him very hard to handle, and self-willed. On some occasions he uses judgment; on others he is wayward enough to try the most even temper.

BASEBALL.

On the diamond Yale's veterans, under Captain S. B. Camp, have started out with the intention of maintaining more of an even pace than in '99, and in the hope of thereby reversing the order of last year, which showed a fine start but a poor finish. The material is promising, although there are likely to be many new faces and some changes of old men. Waddell, who played first, will have hard work to hold his place, and Quinby, third base, has complications with his studies which may take him out of the game.

On their early work the candidates and their abilities gauge something as follows:

Sullivan, the veteran, is the best of the catchers, with Cunha a good substitute, and Hirsch is quite capable of relieving either. In the box, Cook, if his studies permit, would probably be the choice, with Robertson next. Garvan is pitching a good game, and fields his position well, at the same time showing accuracy. Russell, another new man, is wild, but may steady down later. Sharpe, McKelvey, and Wescott fill out the list of possibilities in the pitching department.

Outside the battery the new men are showing up well. Irwin seems to have the making of both a batter and a fielder, while Sharpe, in addition to being a good left-handed pitcher, can cover first better than any other old or new candidate. H. Wescott and Brown are two other good infield players, the latter covering ground well and hitting freely. Camp is sure of short-stop. In the outfield Lyon and Guernsey, also Barnwell, are promising.

On the whole, although the entire outfield and second base of last year are lost by graduation, yet the outlook is encouraging, from the very fact that the battery positions are well filled, which makes Captain Camp's task less difficult than in recent seasons.

ROWING.

The alterations in Yale's system this year lie in the extension of strictly class crew rowing, and the coaching of these crews by men appointed

by the university captain and acting under his authority and instruction. Captain Allen has thus put the class crews in the hands of the veterans of last year's boat. While the result is, at this writing, a seeming increase of difficulties in the way of definite selection, the possible field of choice is larger and more satisfactory; and boating interest has spread more generally throughout the college.

The veterans of former seasons are Allen, Williams, Wickes, Cross, Niedecken, Brock, Mitchell, and Cameron. Brown is also in college, but, as university football captain, will probably not row. The present is the general transition period, and university crew men are being gathered and taken out of class boats.

Of the new men Blagden and Atkinson are most likely.

The great value of the new system is that it produces similarity of style between class crews and 'varsity men—something which has never before been seen at Yale, but which promises to be the groundwork of a plan that means increased material annually.

ABUNDANT STRENGTH AT PRINCETON.

TRACK ATHLETICS.

In addition to the seven or eight men who will likely represent Princeton at Paris, and who are counted upon to win nearly all of Princeton's points at the intercollegiate games, Captain Cregan is keeping a second string in the field, who, if not this season, may in some future season prove point-winners, and if not, will still be athletes, which at all events is the most valuable inheritance of college sport.

Almost fifty men started in for regular training on April 2d, and this is a large number for Princeton. Of sprinters Jarvis is the only possible intercollegiate point-winner.

There are a goodly number of men training diligently and commendably for the distance events, but so far as earning points is concerned, Cregan will probably have to do it all.

Hutchinson seems still to be Princeton's best hurdler, but baseball will undoubtedly occupy all his athletic time.

Garrett P. Serviss, Jr., the freshman high-jumper from Brooklyn, who already has a record of 6ft. 2½ in., is rounding into brilliant form and may increase his record by an inch before the season is over. The only weight-thrower of any ability is R. G. Wright, '02, who played guard on the scrub last autumn. He is said to be the strongest man in college, but he is quite awkward in his style, though he can put the shot 40 feet, and has thrown the hammer 130 feet.

BASEBALL.

The material for Princeton's 1900 baseball team was promising enough at the beginning of the season to cause certain sorts of graduates to make gloomy predictions for the end of it. And, indeed, many well-known cases could be cited by way of bearing out this pessimistic theory; but it is just because they are so well known that such cases are so long remembered and much quoted. As a matter of fact, seasons ending well are more likely to have begun well than badly, and seasons ending badly have by no means invariably started auspiciously.

The out-of-door practice began—later than is usual in Jersey springs, but still considerably earlier than at the New England universities—with a well-seasoned battery back in its old place. Hillebrand and Kafer had played together for three years, and they work somewhat like well-oiled ball-bearing machinery which has run long enough to have “found itself.” Thus far Hillebrand has not been seriously incommoded by malaria, his annual enemy. Illness may prevent his pitching in any one of the approaching great games, and a few weeks ago such a contingency would have been predicted as altogether disastrous; but with the advance of the season the substitute pitcher, Scott, '02, has manifested such improvement, that the fear of Hillebrand's absence is no longer quite a terror to the undergraduate mind.

For first base there is W. Green, '02, who played the position admirably last year. He is also making a very good change catcher. Chapman, '02, substitute last year, was ill during the early part of the present season, but now may stand a good chance. Last year, when a freshman, he seemed to become discouraged for some reason, and did not play the game that had been expected from the fine record he had made at Andover. Perhaps neither will be the first choice. Pearson, a freshman, has done so well he may succeed in keeping the place permanently.

The second base has been one of the new problems this year, owing to the graduation of Bedford. Steinwender, '02, has seemed, for several reasons, to be the likeliest candidate. Bush, a freshman, appears to have the making of a second baseman some time, if not this season. This very important position is already causing worry, and may cause more before the season is out.

At third Hutchinson, '02, who won that position in his freshman year, seems a fixture.

Who will finally play short stop is not yet determined at this writing. Meier, '02, is a good man, and has been especially strong at

the bat in some of the early games. Langdon, '02, the captain of his class team, knows how to play the position, but is not such a good batter. Brokaw, '02, is a brother of former well-known Princeton athletes, but so far has not developed much form.

In the outfield, Watkins has played center for two years and will probably complete his third successfully. For the other two positions there are several candidates: Paulmier, '02, S. V. Brown, '02, a substitute last year; E. S. Burke, '00, who played second base two years ago; A. B. Robinson, '00; and Roper, '02.

The policy that has kept an entire second squad in the field for practice so late in the season cannot be too much commended. It is as necessary to have a second baseball team in the spring as to keep up a scrub football team in the autumn, and for the same reasons, namely, for making plenty of substitutes, educating future players, and also for practice games. The way to train for baseball matches is to play baseball games.

NEW STANDARDS AT CORNELL.

TRACK ATHLETICS.

The backwardness of the season interfered some with Cornell's track training, as with the other branches of athletics. The work, however, is now well under way, with promise of good showing. In the sprints, the middle and long distance runs, the hurdles and the hammer, there is certain to be increase of strength, while in the pole vault the excellent record of last year will be equaled and probably materially bettered.

Wilson, '00, who ran close to Ripley last year in the high hurdles, has greatly improved in form and speed, and expects to do close to 16 seconds.

On the whole, the work already done by the 1900 track team is encouraging. The unusually large percentage of promising material furnished by the entering class suggests attainments within the immediate years beyond all precedent in the university's athletic history. The Interscholastic League, of which George H. Young, '00, is so energetic a president, will also bring to Cornell many desirable preparatory school athletes.

BASEBALL.

The 'varsity baseball team at Cornell met the present season with the loss of five valuable players, C. V. P. Young, '99, captain in '98 and pitcher; Murtaugh, '98, captain of last year's nine; Johnson, '99, third baseman; Genger, '00, catcher in '98 and '99, and Miller, centre-field for four successive years. Thus both in quality and numbers the loss was

heavy. Of the twelve men ranked as 'varsity players last year, however, the remaining seven are in training, and all are expected to show greater or less improvement over their previous work. These are Captain Bole, '00, and Sanders, '01, pitchers; Robertson, '01, first base; Brown, '02, and Dougherty, '01, second basemen; Stratton, '00, short-stop, and Newton, '00, left-field.

Perhaps the most valuable new man thus far discovered is Whinery, '02, who is ably filling Genger's position as catcher. For pitcher, Lyon, '01, who played at Cheltenham Academy and on his freshman team, is showing creditable form, as is also Bushong, '02. Costello, '03, ex-captain of Syracuse High School, is doing excellently at third, while Ferguson, of Pittsburgh High School, and Howland, of the University School, Cleveland, are other promising freshmen for the infield positions. Mueller, '00, is filling Miller's place at centre-field with credit, while Rilling, '02, is proving a capable sub-catcher.

It is hard to tell just what the nine will do when it meets the big colleges. With so many new men there is some danger. While there are, however, not so many stars as last year, yet the team is playing together better than in '99.

ROWING.

Three of last year's 'varsity, Sweetland (5), King (4), and Wakeman (3), are graduated, but the loss will not affect Cornell's rowing prospects adversely—though Wakeman's response at the eleventh hour to the needs of his *alma mater* will be long and gratefully remembered.

The five remaining members of the '99 crew, Robbins (stroke), Dalzell (7) and captain this year, Beardslee (6), Vanderhoef (2), and Hartley (bow) are among the candidates, who include also Smallwood, a substitute, and English and Ayer of the four-oared crew.

But the most encouraging material seems likely to come from the '99 Freshmen crew, of which Francis and Petty (stroke and 5) were especially noteworthy. Taylor and Edmonston are also likely.

Generally speaking the material is, perhaps, an average lot, with some particularly good individuals.

Progress has been unusually slow, due to a backward season and Courtney's illness, but present activity is rapidly making amends.

At least it may be safely said that Cornell will have a better crew this year than in 1899.

UNUSUAL MATERIAL AT PENNSYLVANIA. TRACK ATHLETICS.

Several of the new men are showing inter-collegiate possibilities. Smith and Leary are both

fast in the sprints, and should Smith's ankles, which were badly strained last autumn in football, become wholly strong again, he has a chance for points in the 220-yard. Cook, in the quarter, is much improved. Drumbeller has surprised everyone by his good work. Last season he ran the quarter in fair form, but this year has developed rare speed at the half. Pennsylvania has never been so strong in distance runners as this year. Nor have there ever been so many candidates for the track team, over 200 having presented themselves. Of new pole-vaulters and shot-and-hammer men none of promise has appeared.

The team's outlook is bright, despite the loss of Tewkesbury, the sprinter, and Baxter, the high jumper. McCracken, Kraenzlein, Hare, McClain, Grant, Mechling, and Remington, last year's point-winners, are all showing improved form.

BASEBALL.

For the first time in four years Pennsylvania's nine will start the season with a percentage of experienced players. Seven of last year's team are still in college. These include Flavell, catcher, this year's captain; Layton, substitute pitcher last season; Collier, Shape, and White, in the infield. First base seems likely to be covered by Jones, a new man, who has outclassed the other aspirants; and Heuston, W. Brown, and Biers, a new man, are in the outfield. Changes are, of course, likely to occur, and Orbin may fill short instead of White, who will then be sent to right field, his last year's position. Gawthrop will again be substitute catcher, or go into the field. The men have been given unlimited battery practice, with especial coaching in base-running. The team will be weak in the pitching department—at least so it looks now, despite the promise of Leary.

The interest in baseball at Pennsylvania is not very great, the team having failed to cover expenses the last five years. Games with Princeton and Yale would supply the needed fillip.

ROWING.

Interest in rowing has steadily increased since the victory over Cornell two years ago, and this year over two hundred men are trying for the several crews, an unprecedented state of affairs for Pennsylvania. The weeding process has left three eighths of 'varsity material and two of freshmen.

In the 'varsity are Kintzing, bow; Allyn, 2; Davenport, 3; Van Kathoven, 4; Stehle, 5; Snover (captain), 6; Flickwir, 7; Gardiner, stroke. All except Allyn, Stehle, and Van

Kathoven were of the crew which last year barely beat Wisconsin on the Hudson, the last two being substitutes. There are also some likely candidates on the second crew—Crowther Sinkler and Atkins—who may eventually secure seats in the 'varsity. Pennsylvania's crews were on the water in advance of the other universities and are moving very smoothly for this time of season. In fact, they seem too good for so early. Yet so it seemed last year. No change will be made in the stroke or system of training.

IN THE MIDDLE WEST.

Middle Western universities are showing an abatement of their eagerness to take Eastern trips. Chicago University's baseball team enters upon one this spring, and Michigan's nine will play at Ithaca; but there is less and less disposition to make an annual feature of these extended tours, and there is also less talk about securing Eastern football dates for next autumn. Common sense and dignity would seem to dictate to Michigan, Wisconsin, and Chicago that they make no more contracts for football games in the East unless they are accompanied by agreements for return games. The Middle West should stand on its own dignity as well as on its own ground.

It looks like a satisfactory baseball season. Nearly all of the colleges have a percentage of veterans as well as abundant new material, while interest in the game seems above the average.

Chicago, also, has the majority of last season's players back, and the prospect of a strong team, especially in the battery positions, with Wood and Harper catchers and Smith and Rogers in the box.

Michigan's baseball prospects are encouraging, the entire team of last year being back, except the battery. There is abundant material, enough for two teams, and the needed men ought to be developed. Still the lack of a good pitcher may spoil an otherwise excellent outlook.

Illinois, second to Michigan last year, has lost but two of her players, and numbers among the new men some exceptionally promising.

At Northwestern last year's rather disastrous season left a nine composed almost entirely of underclassmen, who have the advantage of a season's play and form a nucleus of veterans.

Notre Dame, Beloit and Oberlin, a class that is always crowding the bigger colleges, have promise of teams of usual strength. Minnesota and Purdue have never shown much form in baseball, but this season both have arranged games with several members of the "Big Nine."

Iowa made a brilliant record in football last autumn, and has prospects of a good nine, which will meet Illinois, Chicago and Wisconsin.

Minnesota has now secured for athletic director Dr. Harry L. Williams, well remembered as a Yale half-back and hurdler of marked ability, and in recent years connected with the medical department of Pennsylvania. Outside of football, Minnesota has never achieved notable success in athletics.

It has been a hard struggle at Wisconsin to give rowing the financial support it required, but it looks now as if this season's difficulties had been overcome. Truth is that sending crews to the Hudson River is a most expensive and not an altogether satisfactory undertaking. Not more than a score of Wisconsin men see the race, and the financial drain is considerable. The pity of it is that Wisconsin having no worthy natural rival, is compelled, in order to keep life in the sport, to go so far from home. Considering the abundant rowing facilities, especially at Chicago, Minneapolis, Milwaukee, Detroit, and Duluth, the necessity which impels Wisconsin to go East for racing reflects much discredit upon Middle-Northwestern rowing.

This year there is the usual boating activity at Wisconsin; indeed, rowing invariably absorbs quite the flower of the university's athletic material. All the members of the '99 'varsity, which so nearly won at Poughkeepsie last year, have returned with two exceptions, Mather and Little, and the present squad numbers nineteen. Of these are a number of experience, besides those who sat in the '99 boat, as regulars or substitutes.

The freshmen are plentiful in quantity and fully up to the average in quality, and will also be sent East. Both crews have been handicapped by the late opening of the season, though this is customary, the Madison lakes being blocked by the ice, as a rule, until well towards the last of April.

The baseball candidates number thirty-six, only four of whom have played on the 'varsity. These include first base, short-stop, an outfielder, and pitcher. The outlook is not very bright, but all are hard at work.

Curiously, baseball has somewhat declined in college favor in the Middle West the past few years, while track and field sports have gained favor. Much effort is being made this season, however, at all the larger universities, to develop creditable nines. The professional coach—*i. e.*, from the ranks of the baseball leagues—seems at last to be a missing feature, except at Notre Dame.

GOLF.

LIKELY CUP WINNERS OF 1900.

EIGHTEEN hundred and ninety-nine was the best year the game has had in America. Not only was an American-bred golfer produced as amateur champion for the first time, but a number of young college men and schoolboys came to the fore, who, by their style of play, suggested that Mr. Harriman's successor will not come from the old world.

When H. M. Harriman beat Findlay Douglas he played probably the game of his life, and although a repetition of that performance is not a certainty in a long match, it is at least probable. There seems no good reason why Harriman should not remain at the head of American-bred golfers for some time to come. He is the first man in this country to follow Vardon's theory of always running a ball when it is not necessary to pitch it. At Garden City, in the Metropolitan Championship last year, Harriman first disclosed rare judgment of distance and the needed amount of strength to put into his approach, and later he proved to be one of the very best putters in the country. If we consider further that he is strong with his irons and drives a good ball both lengthy and straight, that he turned in a 78 for one round in the open championship at Baltimore, where he easily led all the amateurs, and that he is a match player beyond all else, it is not difficult to figure out how he won the amateur championship in 1899, or why he is the present most likely candidate for it in 1900.

Findlay S. Douglas without doubt has the most attractive form of anyone in America, and, on the occasions (which do not always come in match play) when at his very best, shows a turn of golfing skill not equaled by any amateur in this country. He is certainly the longest second-shot player, plays his mashie with greater skill, and drives as long a ball as anyone, besides being far steadier than all save a very few. But he loses all he gains by throwing away putt after putt on the green.

This year he seems to have greatly improved in this respect. Should he make this end of his game as good as the other he could well hope to regain lost championship laurels.

James Tyng is said to be playing much better than he did last year, having lengthened out his swing and corrected his habit of pushing the ball, when driving, by throwing his body forward with an upward heave, as was formerly his habit. He will cut no figure in the championships, but will probably prove a club tournament cup winner. He is always

a formidable opponent, but his style prevents his ever becoming first-class.

Walter J. Travis is one of the steadiest medal players in the country. This makes him very dangerous, and he can only be beaten by the top game of the best.

Harry P. Toler, who surprised all his friends with the quality of his golf at Onwentsia last year, has good style, but will not be likely to play any better this year than in 1899 and in 1898. He, like Harriman, has good nerve, but no time for the needful practice.

C. B. Macdonald has always played good golf, and always will so long as he swings a club, but, as with many another good golfer, his chances for first honors have decreased as the younger generation has developed. Yet he is no doubt the third best amateur in the country on present public form.

Herbert Leeds played at his very best over his own course, at Myopia, in 1898, and has never since equalled it. He is not apt to prove a factor in the big tournaments.

J. G. Thorp has a style which suggests no ability beyond an average fair game, yet he has made some exceedingly good records, and is a match player whom all but the very best will have occasion to fear.

Jasper Lynch plays a good, fair game, with very pretty style, but has not strength enough to last out a long tournament or to play a long course.

Q. A. Shaw, Jr., is a player of possibilities, but, as in racquets, he is so unsteady as to leave him out of consideration, in really high-class company. He has a beautiful swing, strong wrists, and is capable of immense improvement.

F. W. Menzies can always be depended upon to play good golf, but his style is too stiff to permit of really first-class play.

R. C. Watson, despite his southern defeat, has recently shown some improvement. He has lengthened his swing, plays his irons better, and is steadier. He is capable of great improvement, and will prove a hard man for the best when, as the French say, he really "arrives."

Harry Hollins is another boy with a free and easy swing, who gets a very long ball from the tee. He plays his irons better than any other of the younger golfers.

John Reid, Jr., if he had time, would, I believe, be the best of all the younger generation. As it is he plays an exceedingly good game, and will be very near the top this year.

W. Holabird, Jr., is yet another young player of great promise, who, if he improves this year as much as he did last, may count eventually upon developing championship form.

Owen Winston, like Holabird, only requires age and more practice to become one of the very best.

C. M. Hamilton came to the front last year and is playing better this year. He is a steady, good player of much promise.

G. G. Hubbard and J. F. Curtis are a pair who play really good golf with beautiful style; and with an equal amount of improvement this year as last, will be scratch men anywhere. Louis Livingston, James G. Averill, Percy Pyne, 2d, George Clark, Jr., Stuart, Cheney, Robertson, and C. Hitchcock last year all showed that they are capable of becoming first-class men. They have good style, and play with a freedom which is, of course, entirely lacking among the older men.

H. R. Johnson is a new man who has played only one year. He drives probably the longest ball of any one in America. If he can resist the temptation to overdo this feature and develop the rest of his game, he should make an excellent showing this year. His iron shots are long and straight, and he has the strength needful to a good player. I expect to hear from him the latter part of the season.

Some other players who are improving, and will figure more or less prominently in club tournaments, are W. B. Smith and Egan in the West, Reginald Brooks, Howard Colby, A. M. Ripley, F. H. Bohlen, and Wm. McCauley in the East.

Judging by last year's play and what there has been seen so far this season, which is very little, it looks as if Harriman, Douglas, Macdonald, Reid, Hollins, Holabird, Winston and Travis, Watson, Tyng and Toler would divide the major number of the 1900 cups among them.

The championship dates have been decided on as follows:

1. Amateur Event, at Garden City, July 2d.
2. The Woman's Championship, at Shinnecock, August 28th to September 1st.
3. Open Championship, on the Chicago Golf Club course, October 4th.

The outlook of golf for the coming season is marked by conservative growth in all directions, by a steady and sturdy progress of clubs, and by but a very small modicum of the results of past errors of judgment. Only here and there has vaulting ambition o'erleaped itself, and even in the few such notable cases there are others ready and willing to take up the over-weighted craft and work it into safe waters.

Considering the somewhat experimental nature of the game and the question of its fitting the social and recreative necessities of widely differing sections of the country, it is really remarkable how uniformly golf has been found to fit snugly and successfully into the social machinery, and how substantial has been its support both in material means and, what has been of more importance, in administrative abilities. Many a links is guided by the brains that in the world of commerce and finance govern economic armies and conduct world-wide operations.

In the contemplation of the technique of the game and in following the career of its foremost exponents, one is apt to overlook some of the most far-reaching consequences of the adoption of golf as the great social recreation: or to consider that its broadest and most beneficial results, aside from the pleasure of playing it, is in the wave of health-giving vigor sweeping through and through every stratum of society and invigorating every period of life. Yet probably one of its most important consequences will be its bringing into observation unrestrained and intimate, both sexes, for periods and under conditions that lay open the idiosyncrasies, the foibles, and the failings, no less than the more amiable traits. This must lead to a better, safer, because wider, knowledge of the young by the young, and afford thereby a confidence that may avoid many errors of judgment.

The opening of the normal Northern season at the Atlantic City Country Club at Northfield brought together as characteristic a gathering as will be seen during the season. Champions and ex-champions and players of high repute met there with an eagerness bred of a winter's enforced abstention.

The play divided itself mainly into two contests. The first was that of Vardon, the English open champion, and the best ball of the United States amateur champion and the ex-amateur champion (Harriman and Douglas).

Of this contest there needs no more be said than that Vardon won, except, perhaps, to explain that "the best ball" means that of two players' scores at each hole, only the lower is counted against the challenger.

The amateur contest was won by Walter J. Travis over Findlay S. Douglas in the finals, Harriman having fallen by the way.

Garden City links, in addition to having been selected for the amateur championship of the United States of America, as noted, was also the scene this year of the Interscholastic championships, a contest growing annually of more and more importance.

THE ROD.

OPENING OF THE TROUT SEASON.

HINTS TO ANGLERS.

WITH the month of April the legal days of trout fishing open in a majority of the States, and many anglers brave the most tempestuous weather in their eagerness to capture the brook beauty. The elect of the craft, however, those who believe and feel strongly that "it is not all of fishing to fish," contentedly wait until the mild days of May and June restore the environment of the sport to its early summer charm and the trout to their vigor of game qualities and delicacy of flavor. But be this as it may, both classes, the angler of sentiment and the angler of greed, are, so soon as the legal day dawns, conscious of a thrill of expectancy and apt to unshelve their rods, overhaul reels, lines, and leaders, while with gentlest care the stock of flies left over from the last season are handled and rearranged.

If not done during the winter months, the trout tackle is sure to be overhauled, repaired, and replenished in the early days of the season, and there are many anglers who need a word of caution and advice as to their outfit and the use of it. The old ones "know it all," or think they do, until a new experience on the stream disturbs the complacency of their wisdom by the failure of a favorite fly to lure a fish; or the unusual tactics of a trout, when hooked, belies their knowledge of its habits and traits and foils their skill.

The purchase of trout tackle of excellent quality does not entail a large expenditure of money. We suggest that the beginner buy a nine-ounce fly-rod, ten feet long, made of lancewood; a good one can be bought for eight dollars. He should also purchase a single-action click reel (\$2.00), an enameled waterproof silk line (\$1.50), and a half-dozen single gut leaders (\$1.25), each six feet long. To these add about three dozen standard flies, three of each pattern. By standard flies we refer to the hackles and palmers, black, brown and ginger and winged flies, such as the professors, Montreal, Seth Green, coachman, grizzly king, queen of the waters, white miller, red spinner, or flies of similar patterns and forms.

There are at least fifteen hundred sizes and dressings of artificial flies used by anglers in this country and England, but a fair assortment of the accepted ones of standard makes will answer the purposes of the average angler.

The flies selected for use in the early part of the season should be tied on Nos. 6 to 10 hooks,

and the larger sizes should be used if the trout stream is at all in flood. Later in the season on small brooks Nos. 12 to 16 are most killing.

The cost of these three dozen flies will be about \$4.50, and when the outfit is completed by the addition of a fly-book (\$1.50), a creel (\$2), and a landing net (\$1.25), the aggregate cost will be found to be only twenty-two dollars. Every article purchased should be good and serviceable, and, with the exception of the flies and leaders, will do excellent service for many seasons.

To sum up: The beginner in trout fishing should buy, at the start, a good outfit from a reliable dealer; should guard carefully against acquiring a crude or careless form when learning to cast a fly; should study for days, aye, for seasons, the methods of his skilled companions when on the stream; should study the habits of the trout, their hours of feeding, their fighting tactics, and their places of resort for repose or digestion; and, above all, the beginner, failing to feel a thrill in the pursuit of the sport or from its environment, but merely a sensation of pleasure in killing something, should at once present his outfit of tackle to a humbler but more ardent disciple of the craft, who feels that "it is not all of fishing to fish."

CARE OF TROUT AFTER CATCHING THEM.

Kill your trout as soon as possible after getting him into your hands. Never let him die a lingering, gasping death, or allow him to pound his delicate flesh in a boat or basket. If you do his flavor will be impaired for the table, which doubtless is a stronger argument with some trout score-seekers than the inhuman side. The killing of an ordinary brook trout is most expeditiously done by breaking its neck, although some of the monsters of Rangeley Lakes may require the crack of a club. Many anglers kill their trout by inserting the blade of their fishing knife into the spot on the back where the body joins the head.

Care of your trout does not end after killing. They should be well packed in ferns, leaves, grass, or moss dampened in the coolest spring water you can find. If you are fishing on a stream and intend to return along it, it is a good plan to cache your fish in secure and convenient places, to be taken up when on your way homeward. You will find them in much better condition than if subjected to the jolts and accidents of a day over a rough trout stream.

Another good suggestion is that you take time to clean your fish when you halt for your noonday lunch, all of which means don't let your fish become bruised and don't forget to keep them cool as possible.

TAKING SHAD WITH ARTIFICIAL FLIES.

There are but few rod fishermen who have caught a shad with the fly, yet it is one of the

most valiant and stubborn fish to creel when fastened on light tackle. May, particularly in the New England States, is one of the most propitious months in which to lure them, the proper condition being a large quiet pool at the foot of a turbulent rapid. In such places they appear to rest before stemming the rushing waters on their upward trip to their spawning beds, which are on the shallows of highly aerated brooks, hundreds of miles from the ocean, whence these fish come in early December on the east coast of Florida, and then all through the summer months into the rivers of the Atlantic coast, as far north as New Brunswick, Canada.

When the shad reaches waters above tide-flow and the pools below falls, or the long stretch of rapid rifts above them, they will take feathered lures when properly made and presented to them, and this is how it is done :

Select flies as near as possible to the natural fly found at shad waters ; the white miller, however, or the scarlet ibis, or one having a peacock herl body wound with silver tinsel, red or brown hackle for legs, and woodcock feathers for wings, will be attractive. Although I have never seen on land, in water, or in the air, an insect bearing the slightest resemblance to the scarlet ibis, and doubt that anyone else has done so, yet the shad takes it greedily. These flies should be tied on hooks not larger than No. 6 or 7 Limerick, as the fish rise more freely to small flies.

When equipped and the water is in good condition, anchor your boat at the foot of a rapid, and let your flies float down on the edge of the current thirty to fifty feet, as occasion arises, over the deep water of the pool. If the shad are there, you will soon be rewarded and rejoiced, for it is not only an aerial acrobat, but a deep surger and desperate fighter—in fact, it is considered by the few rodsters who have taken it as superior in its lordly resistance to that tiger of the water, the “bronze-backer,” more generally known as the small-mouthed black bass.

Although the artificial fly is the most attractive to the shad, it has been known to take the garden worm, a piece of fresh-water mussel, and even a live minnow. Frank Forrester, in the forties, wrote: “The fly-fisher will find much sport in fishing for shad during its upward run in the spring,” and Thad. Norris, the Father of the craft in America, told us in the sixties: “I was once fortunate enough to hook three shad in succession when fishing for perch with a bright little minnow, below Fairmount Dam on the Schuylkill River.” Thus we see that fishing for shad was followed many years ago, and the angler of to-day is neglecting a pastime which will repay him in sport and provide a most delicious fish for table use. Suitable waters are numerous in the Eastern and Middle States, and ordinary trout tackle will do the work.

SEASONABLE FLIES.

Fly-fishing is the highest form of the angling art ; and it behooves the angler to set in order his fly-book with Cottonian particularity, that the list of his lures be in accordance with the necessities of the budding season. Here is a

list of such flies as a life-long experience has justified the writer in arranging with a view to seasonableness. They are intended to be used throughout the month in the order given, and apply very closely to all parts of the country where the brook trout grows and takes the fly :

Coachman.—For early and late in the day and on dark days ; white wing, peacock herl body, brown hackle.

Royal Coachman.—Scarlet silk body with two bands of peacock, brown hackle, white wing.

White Miller.—White throughout.

Professor.—Yellow silk body, ribbed tinsel, pintail breast feather wing, brown hackle ; tail, three fibers of ibis.

Brown Hackle.—Peacock body, brown hackle wound thick ; no wings

Gray Hackle.—Green silk body, ribbed silver tinsel, gray hackle, no wings.

These six flies may be relied on to catch more fish throughout the month than any others. They are useful at all times, but especially so in the early fishing of the month, when the fish are not so fastidious as they become later.

For all round purposes, the following is a list of patterns the writer has found most effective, premising, of course, that the above six patterns be used as well :

Abbey.—Body, crimson silk ribbed gold tinsel ; wings pintail duck ; hackle, brown ; tail, three strands tippet of golden pheasant ; tag, gold tinsel.

Alder.—Peacock herl body ; wings, wood duck ; hackle, brown ; tag, gold tinsel.

Black Gnat.—Body, peacock herl ; wings, American crow ; hackle, black.

Red Ant.—Body, scarlet silk ; wings, ibis ; hackle, red or scarlet stained ; tag, peacock herl.

Red Spinner.—Body, crimson silk ribbed gold tinsel ; wings, mallard's under feather ; hackle, brown ; tail, three fibers brown hackle ; tag, gold tinsel.

Stone Fly.—Body, gray silk ribbed silver tinsel ; wings, mallard's under wing feather ; hackle, gray ; tail, three fibers black hackle ; tag, silver tinsel.

Montreal.—Body, dark crimson silk ribbed, with gold tinsel ; wings, turkey's wing feather ; hackle, scarlet ; tail, three fibers ibis ; tag, gold tinsel.

Cow Dun.—Body, greenish brown worsted ; wings, brown hen's wing feather ; hackle, brown ; tag, gold tinsel.

Seth Green.—Body, green silk ribbed, yellow silk twist ; wings, lead-colored feather from under mallard's wing ; hackle, brown ; tail, three strands mallard ; tag, gold tinsel.

Soldier Palmer.—Body, scarlet silk ribbed gold tinsel ; hackles, brown, one short up the body above tinsel, one full at head and shoulders ; tag, gold tinsel.

Pale Evening Dun.—Body, yellow silk ribbed gold tinsel ; wings, mallard's under wing feather ; hackle, yellow ; tail, three fibers from mallard's feather ; tag, gold tinsel.

Caldwell.—Body, claret silk ribbed gold tinsel ; wing, pintail duck ; hackle, brown ; tail, three fibers wood-duck ; tag, gold tinsel.

Green Drake.—Body, straw silk, ribbed loose coils with black silk twist; wings, wood-duck; hackle, brown; tail, a few fibers of wood-duck.

Cinnamon.—Body, brown worsted; wings, speckled; brown hen feather but speckled; hackle, brown; tail, three strands black hackle; tag, gold tinsel.

Grasshopper.—Body, brown worsted; wings, jungle cock's feather; above it one strip yellow straw color, swan, dyed, and one red

ibis about three fibers each; hackle, scarlet; tail, yellow, swan and pintail duck three fibers each; tag, gold tinsel and one-sixteenth inch green silk; head, peacock herl.

Jungle.—Body, scarlet silk, ribbed gold tinsel; wings, jungle cock's feather, single; hackle, white, with black center; tail, three wood-duck fibers; tag, gold tinsel.

Grizzly King.—Body, green silk, ribbed silver tinsel; wings, pintail duck; hackle, grizzled; tail, red ibis; tag, gold tinsel.

THE LAWS AND OPEN SEASONS OF THE U. S. A.

Alabama.—No fish laws.

Alaska.—No fish or game laws.

Arizona.—Trout from June 1st to September 1st.

Arkansas.—No close seasons for fishing.

California.—Striped bass must not be taken less than three pounds in individual weight. Black bass can be caught from July 1st to January 1st, and trout from April 1st to December 1st. Steelhead trout can be taken at any time in tide-water with hook and line; salmon, in tide-water, from October 16th to September 10th; above tide-water from November 15th to October 15th.

Colorado.—Trout (not less than eight inches long) and other fish can be caught from June 1st to October 31st, but no one person shall take more than twenty pounds of trout or fifty pounds of other fish in one day.

Connecticut.—Trout (not less than six inches long) can be taken from April 1st to July 1st; black bass from July 1st to May 1st; pickerel and wall-eyed pike shall not be caught less than twelve inches long.

Delaware.—No restrictions on hook-and-line fishing.

District of Columbia.—Black bass and croppie can be caught from June 1st to April 1st.

Florida.—No close season for fish.

Georgia.—No close season for fish.

Idaho.—No species of fish can be caught except from May 1st to November 1st.

Illinois.—Fishing through the ice is permitted only "from March 1st to December 1st," a virtual prohibition.

Indiana.—Fish can be caught (only with hook and line) in all streams, and in any month except May and June. Pickerel and pike-perch cannot be taken when less than twelve inches in length, and black bass must not be less than nine inches, and not more than twenty-four black bass can be taken by one person in one day. Rock bass and croppie must not be less than six inches in length.

Indian Territory.—No restrictions on fishing.

Iowa.—Salmon (pike-perch?) and trout (not less than six inches) can be caught from March 1st to November 1st. Black bass, pike, croppies, or "other game fish," from May 15th to April 1st. The Mississippi, Missouri, and Big Sioux River are exempt from this law, also the Des Moines where it forms the boundary line with the State of Missouri.

Kansas.—Black bass, rock bass, croppie, pike, rainbow trout, and "other game fish" can be taken from May 1st to March 15th.

Kentucky.—No restrictions on fishing.

Louisiana.—No close season for fish.

Maine.—Land-locked salmon, trout, and toque can be taken when the ice is out of waters until October 1st, except on the St. Croix River and its tributaries, and on all waters in Kennebec County in which the close time shall be from September 15th until the ice runs out in the following spring. In Oxford and Franklin counties the open season commences May 1st and ends October 1st. White perch can be caught from July 1st to April 1st; these fish when accidentally caught during the close season may be kept. [A large number of streams are closed, and the local laws forbid fishing in them.] Only fly-fishing is permitted in Quimby Pond, Four Ponds, South Bog Stream and Pool, Seven Ponds, Catchin Tim, Mud, Tufts and Duttin Ponds, and the catch is limited to twenty-five pounds in a day. Blue-back trout are everywhere protected at all times; seasalmon can be taken from July 15th to September 15th, and these fish, also land-locked, must be nine inches in length, and trout must not be less than five inches in length. All devices "except single hooks and lines, artificial flies, artificial minnows and insects, spoon hooks and spinners, so-called," are forbidden. Twenty-five pounds in all of land-locked salmon, trout, toque, or white perch can be transported at any

one time and must be accompanied by the owner thereof. Night-fishing, inland, cannot be done except with a dip-net, and the possession of jack-lights, spear, trawl, or net of any other kind is evidence of illegal use. Anyone who has lawfully in possession one trout, one toque, one land-locked salmon or one white perch, or ten pounds of either kind of these fish, may send the same to his home or to any hospital in the State without accompanying them.

Maryland.—Trout can be taken from April 1st to August 15th, but must be six inches long. In the Potomac, and its tributaries, black bass, rock bass, pike, pickerel, and wall-eyed pike can be caught from June 1st to April 15th, except in the Monocacy tributary.

Massachusetts.—Salmon may be caught from May 1st to August 1st; trout, land-locked salmon and lake trout, from April 1st to December 1st, and black bass from June 1st to December 1st, with no limit of time for the Connecticut River and tributaries.

Michigan.—Red-spotted trout, land-locked salmon, grayling or rainbow (California) trout can be taken May 1st to September 1st; mascalonge, "black or strawberry, green or white bass," from July 1st to March 1st; trout and grayling must not be less than six inches in length. Exportation forbidden.

Minnesota.—All varieties of trout may be taken between March 1st and September 1st; black bass of both species from May 15th to March 1st, and any other food-fish between May 1st and March 1st. Fishing with artificial lights prohibited, also within 400 feet of any fish way, except from May 15th to March 1st. Hook-and-line fishing only permitted. All fish caught must not be less than six inches in length, except minnows for bait. Fifty fish of any species must be the maximum score in any one day by one person. Fifty pounds of fish may be carried out of the State when accompanied by the actual catcher of them, if intended for consumption by the family of the person catching them, and not for commercial purposes.

Mississippi.—No State fish or game laws.

Missouri.—No restrictions on hook and line.

Montana.—No close time as to angling.

Nebraska.—No close seasons are prescribed for fish, but it is unlawful to catch California salmon, land-locked salmon, trout, shad, whitefish or carp that have been placed in any waters of the State by the Fish Commissioners or by private persons.

Nevada.—Trout and land-locked salmon can be caught from June 1st to October 1st, and lake trout from May 1st to January 1st. The open season in the Humboldt River and its tributaries commences on the first day of June and ends November 1st.

New Hampshire.—Single hook and line with bait, artificial fly or spoon only can be used. Salmon, land-locked and sea-going, can be taken from April 15th to September 30th; trout, from April 1st to August 1st. In the month of August trout (square tail) can be caught in the counties of Coos, Grafton, and Carroll, but not in the month of April. From the lakes and ponds only of the aforesaid counties the trout can be taken until September 14th, inclusive. Ten pounds of trout only per day to each person, and none of them must be less than five inches in length. Pickerel, land-locked salmon, golden trout and striped bass to be ten inches, and black bass six inches long. Pike perch and white perch, except in tide-water, cannot be taken in May and June; black bass, between June 15th and April 30th; mascalonge, pike, pickerel, and grayling cannot be taken in May or June, and the capture of fish introduced by the Fish Commission is prohibited for five years from date of planting. Special laws have been enacted for the following waters: Lakes Warren, Sunapee, Diamond Ponds, Spofford, Silver, Granite, Dan Hole tributaries, Pleasant Pond and tributaries, Lake Wentworth (Smith's Pond), Greenough Ponds, tributaries of Ellis,

Outing for May.

Wildcat, or Saco river, ponds in Carlers Notch and Waukegan Lake. These special laws slightly lengthen or shorten the open seasons and the size of fish caught.

New Jersey.—Black bass from May 30th to December 1st, brook trout from April 1st to July 15th. Black bass must be nine inches and trout six inches long. This restriction does not apply to fish taken for stocking purposes. Pickerel can be caught from May 1st to February 20th. Introduced fish must not be taken until three years after the date of planting.

New Mexico.—Trout can be captured from June 1st to November 1st, and bass from July 1st to February 1st. The trout must not be less than six inches in length. Exportation from State forbidden.

New York.—Trout of any kind (not less than six inches) can be caught from April 16th to August 31st, both inclusive. On Long Island the open season commences on March 20th and ends on September 1st. Lake trout and land-locked salmon from May 1st to September 30th, both inclusive, except in the counties of Dutchess, Ulster, Sullivan, Orange, Rockland, Putnam, Westchester, and Richmond, where land-locked salmon may be taken from April 1st to June 30th, both inclusive. Not more than twelve pounds of brook, brown, or rainbow trout can be transported and they must be accompanied by the person who owns them. Black bass can be caught from June 15th to January 1st, both inclusive, but each fish must be ten inches in length. In the County of Jefferson the open season for black bass commences June 6th and ends January 1st. In Lake George and Schroon Lake from July 31st to December 16th, both inclusive. Only twenty-four black bass can be taken by one person in a single day, and when two persons are fishing from the same boat the aggregate of bass taken shall not exceed thirty-six in any one day. On Long Island black bass can be caught from May 30th to December 31st, both inclusive. In the Thousand Islands waters black bass can be taken from June 9th to January 1st, and only twelve can be caught by a single person in one day and the aggregate of the catch by persons fishing from the same boat must not exceed twenty-four. Pickerel, pike, or wall-eyed pike, can be taken from April 30th to March 1st, but in the Thousand Islands waters the open season commences on June 9th and ends on December 31st. Mascalonge from May 30th to the last day of February, both inclusive. In the Thousand Islands, from June 9th to January 1st, salmon, land-locked salmon, or lake trout shall not be taken less than fifteen inches long, and fishing is not allowed within fifty rods of a fish-way. Salt-water striped bass must be eight inches long when caught. The following-named waters must not be fished until 1903: Eastbrook and Westbrook or any of their tributaries in the town of Caldwell, or Harris or Edmunds Brook, Indian and Fickle Brooks, in the town of Bolton, Warren County. Pike perch or pike (great Northern pickerel) cannot be taken from Lake George and Glen Lake or any of their tributaries except from June 15th to January 1st, nor bullheads except from July 1st to January 1st, nor black bass from any waters in the town of Horicon, except from July 16th to January 1st. Perch can be taken at any time from Lake George. Salmon trout and land-locked salmon can be caught in Long Island waters from April 1st to September 30th both inclusive. In Jamaica Bay fishing is allowed every day of the year.

North Carolina.—Trout can be killed from December 30th to October 16th.

North Dakota.—Fishing with hook and line for all kinds of fish is permitted from May 1st to November 1st. Exportation prohibited.

Oklahoma.—No restriction with hook and line.

Ohio.—Brook trout, salmon, land-locked salmon and California salmon can be caught from March 14th to September 15th.

Oregon.—There is no law affecting hook-and-line fishing for salmon; trout can be caught from April 1st to November 1st, but not less than five inches long. Eastern brook and Loch Leven trout are protected until 1902.

Pennsylvania.—Native brook trout can be caught from April 15th to July 15th, but not less than five inches in length, and fishing must not be done for three years from date of plant, in any stream wherein brook trout have been placed by the Fish Commissioners. Salmon, not less than three pounds in weight, and only with hook and line, can be taken from March 1st to August 15th; lake trout from January 1st to October 1st; carp are not protected; black bass (6 inches), wall-eyed pike (6 inches), and rock bass (5 inches), can be caught from May 30th to January 1st; pike or pickerel between June 1st and February 1st. None of the above restrictions apply to Lake Erie. "Green, yellow, willow, Lake Erie and grass bass" can be taken

from June 1st to January 1st. This restriction does not apply to Lake Erie except in the ponds on the island or peninsula forming the north and east shores of the harbor of Erie. Black bass and wall-eyed pike must not be caught from the Delaware River less than nine inches long, and rock bass must be six inches in length. No salmon or brook trout can be caught in the waters of Pike county except from May 1st to August 1st, and no pike or pickerel except from June 1st to February 15th. It is unlawful in Tioga county to catch brook trout or black bass for the purpose of sale.

Rhode Island.—Fish must not be taken from waters set apart by the Fish Commissioners for the cultivation of fish, except through the ice, and with hook and line only in those ponds set apart for the cultivation of black bass, until after the expiration of three years from the date of the plant. After the expiration of said term of years no black bass can be taken from the waters of the State, except Sneach Pond in the town of Cumberland, and Moswansicut Pond in the town of Scituate, between March 1st and July 1st, and no fishing is allowed in any waters of the State except on Thursdays, Fridays, and Saturdays, excepting the months of December, January, and February. The open season for trout is from April 1st to July 15th.

South Carolina.—No restriction on fishing.

South Dakota.—Two hooks only can be used, except for suckers and buffalo fish, upon which spears can be used. Trout, bass, carp, shad, or croppies may be caught from May 1st to October 1st; none of these fish can be sold or shipped from the State.

Tennessee.—No restrictions on fishing.

Texas.—No close season for fish.

Utah.—Trout and bass, with hook and line only, can be taken from June 14th to December 15th, and each fish must not be less than seven inches long. Perch, rock bass, croppie, Eastern brook trout, rainbow trout, goldfish, silverfish, and silver eels are protected until March 10, 1901.

Vermont.—Trout, land-locked salmon, salmon trout, and "longe" can be caught from May 1st to September 1st; black bass from June 15th to January 1st; wall-eyed pike from May 1st to January 1st, except in Lake Champlain; white perch and mascalonge from June 15th to April 15th, except in Lake Champlain. Fishing through the ice in any waters where trout, lake trout, or land-locked salmon exist is not permitted; pickerel or pike can be shot with a gun held to the shoulder, between sunrise and sunset, from May 1st to March 15th; hook-and-line fishing only is authorized. All species of trout caught must not be less than six inches in length; black bass not less than ten, and a salmon or lake trout, land-locked salmon, or steel-head trout must be twelve inches in length.

Virginia.—Trout can be taken between April 1st and September 15th; black bass between July 1st and May 15th. In the Shenandoah river the open season is from May 15th to April 1st for all kinds of fish. Bass of all species, pike, pickerel, and wall-eyed pike, cannot be taken from the Potomac River, except from June 1st to April 15th. This law does not apply to the river below the Little Falls, near Washington. There are numerous local laws.

Washington.—The local or county laws are too numerous to be printed in this summary. So far as we can learn there is no general State law.

West Virginia.—Jack salmon can be taken from June 15th to April 15th, but not less than seven inches long; brook trout, four inches; land-locked salmon and brook trout from January 1st to September 1st; all varieties of bass, pike, pickerel, and wall-eyed pike, from June 15th to April 15th; pike when caught must not be less than eight inches in length and black bass six inches. "The measurements of fish shall be from end of nose to centre fork of tail."

Wisconsin.—Fish, not exceeding twenty pounds in weight, can be exported if accompanied by the owner. Black bass (six inches), mascalonge, and pike can be caught from May 25th to March 1st, except in Big Green Lake, where the open season shall be from July 1st to March 1st, and in Devil's Lake, where the open season begins June 15th and ends December 15th. The above-named law does not apply to Rush Lake in Fond du Lac and Winnebago counties, or Geneva Lake in Walworth county. All varieties of trout can be caught from April 15th to September 1st.

Wyoming.—"Speckled trout," land-locked salmon, grayling, and California or rainbow trout, can be caught from May 1st to November 1st; trout and black bass must not be less than six inches in length when caught. Exportation prohibited, and it is unlawful for any person to have in possession "more than twenty pounds of game fish" in any one day.

Yellowstone Park.—Hook-and-line fishing is permitted at such times and manner as prescribed by the Secretary of the Interior.

THE LIGHT HARNESS HORSE.

AMATEUR DRIVING CLUBS.

ORGANIZED by the late Col. William Edwards in June, 1895, the Gentlemen's Driving Club of Cleveland was one of the first of its kind to be successfully established on strictly amateur lines. Though its charter members were enthusiastic they were not without many misgivings as to eventual success. It was remembered that other associations had been attempted and failed.



W. M. Cummer, Cleveland,
Driving "Temper," 2:09½, Trotter.

Extreme care was exercised in choosing the members and in making rules and by-laws, and to Colonel Edwards' efforts much of the club's success is due. It now has one of the most beautiful regulation mile tracks in the world, with a grand stand seating 5,000. Its meetings are well patronized and are attended by the best people in Cleveland.

Some idea may be had of the growth of this club by a glance at its racing history.

In 1895 a total of one hundred and fifty-five heats were contested at the fourteen matinées held that season. Of these eighty-five were slower than 2:30, and none were as fast as 2:15. In 1899 there were decided two hundred and seventy-two heats, and only ten of these were slower than 2:30, while four were in 2:10 or better, thirty-one in 2:15 or better, and one hundred and fourteen in 2:20 or better. This is a remarkable fact when one considers that all races are to four-wheeled wagon. The little mare Temper, owned and driven by Mr. W. M. Cummer, trotted the fastest mile—2:09½. Ellorce trotted a mile in 2:10½, Askey in 2:10¾, Faustina in 2:12¼, and Fanny Foley in 2:13½. Sunland Belle paced a mile in 2:07½, the fastest matinée performance ever recorded.

Cleveland holds nearly all of the amateur wagon records, several of which are faster than the present professional marks. The

Cleveland club's system of prizes includes a blue ribbon to the winner of each race, red to second, and yellow to third in the summary.

At the end of the season, handsome silver cups are presented to winners of the largest number of races in both the trotting and pacing divisions. Cups and ribbons are also given for, amongst other results, the fastest miles, the largest number of races won by a stable, the largest number of races won by "green" performers.

The list of matinée horses which have been used by the members of the Cleveland Club numbers several hundred, including such well-known animals as Temper, 2:09½ to wagon (professional record, 2:13½); Ellorce, 2:10 to wagon (professional record, 2:09½); Praytell, 2:09½; Alrich, 2:12½; Anita S., 2:19¾ to wagon (professional record, 2:23¼); Anton, 2:16¾ to wagon (professional record, 2:20¼); Czarina, 2:19¼ to wagon (professional record, 2:31); Dean, 2:16¾ to wagon (professional record, 2:20); Dorothy, 2:19¾ to wagon (professional record, 2:23½); Eloise, 2:15 (wagon record, 2:16¼); Freeland, 2:17 to wagon (professional record, 2:17¾); Incense, 2:14½ to wagon (professional record, 2:17¾); Lena Wilson, 2:15½ to wagon; Lissa, 2:16½ to wagon (professional record, 2:16¾); Mayflower, 2:16½ to wagon (professional record, 2:18); Newcastle, 2:11½ to wagon (professional record, 2:11¾); Peep o' Day, wagon record, 2:16½ (professional record, 2:21); Peter Swift, wagon record, 2:18 (professional record, 2:24¼); Silverlake, to wagon, 2:16½ (professional record, 2:21¼). All the above are trotters. The pacers at Cleveland have not fared so well, the only real fast one being Sunland Belle. Her record to



Charles A. Otis, Jr., Cleveland,
Driving "Briar Rose," 2:20¾ to wagon.



"Star Pointer," 1:59¼,
Champion of the World.

weighing from 28lbs. to 35lbs., while speed wagons weigh from 58lbs. to 95lbs. Mr. W. J. White, who owns the champion pacer, Star Pointer, 1:59¼, is a prominent member of the Gentlemen's Driving Club, and it is understood that he will start the great horse in one of this season's matinées to beat the present professional record of 2:03¼, held by Bumps. When Star Pointer is fit he will probably draw a wagon a mile in very close to two minutes.

Among the members are Messrs. Calvary Morris, D. R. Hanna, Frank Rockefeller, M. A. Bradley, E. W. Christy, W. M. Cummer, H. K. Devereux, J. T. Dewey, C. E. Grover, H. M. Hanna, L. C. Hanna, W. P. Murray, F. N. Reed, W. J. White, and W. B. White.

Great preparations are being made for this year's matinées. Arrangements are under way for a series of inter-city races between Boston, Pittsburg, Cleveland, Detroit, and Toledo.

The Pittsburg Driving Club, an offshoot in a sense of the Cleveland impulse, has had a very successful career. It was organized on much the same lines as the Cleveland club, and its membership includes the best citizens of Pittsburg and Alleghany. It has a fine fast regulation mile track, and will this year build a handsome club-house, grand stand, and stables.

Its members have made numerous purchases of trotters and pacers for this season's racing, with the main idea in view of securing every amateur record possible. Last year, although new in organization and track, the Pittsburg club secured the amateur team trotting record of the world, 2:13¼, to wagon, and the stallion trotting record of the world, 2:10½, to wagon. Both these records are held by Mr. J. D. Callery, the team record being made by him with his stallion Guy and his mare Ferris W., while the stallion record was made with Guy.

The fastest mile at the trotting gait ever driven by an amateur to wagon is also held by a member of the Pittsburg Club, Mr. W. S. Steele, who drove Cephas in 2:09¼ at Cleve-

wagon is 2:07½, while her professional record is 2:08¼. It will, no doubt, be understood that all the professional records referred to are made to sulkies

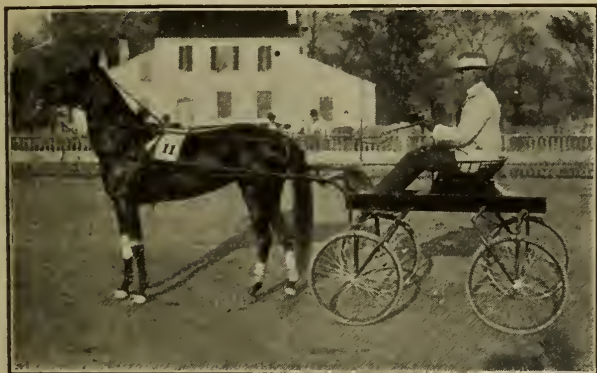
land, September 8, 1898, in the presence of five hundred people. Cephas is owned by Mr. Harry Darlington, who drove the horse a mile in June, 1898, in 2:12¼. Mr. Darlington also owns Rose Turner, 2:13½; Marguerite, 2:14; Faust, 2:18¼, and several "green" ones, including the sensationally fast gelding, Mr. Middlemay, that has pulled a cart a mile in 2:10¼. It is Mr. Darlington's ambition to get a team that will trot to pole in 2:10, and it seems reasonable if he can get a perfect mate to Cephas that he will solve the problem.

Mr. Charles Donnelly has aspirations, and when it is considered that he owns Dick Hubbard, 2:09¼; Little Edgar, 2:10¼ (who was second to Tommy Britton in 2:08¼ last year); Curta, 2:13¼, and Linsign, 2:15½, it would seem that he has reasons for his ambition. Mr. P. C. Knox has the team, Wert, 2:15½, and B. C., 2:15½, for which he paid \$10,000, and he also has the fast Sidney gelding, Dr. Leek, 2:09¼. The latter should be an ideal matinée horse. That stout-hearted gray gelding, Success, 2:11½, is owned by Mr. W. V. Callery. Mr. C. B. Schaeffer has Baronwood, 2:14¼, and this horse is bound to be heard from in this season's matinées. He is a shapely gelding, good-gaited, and trots very fast. I look for the brown horse, Demon, by Wilton, to trot to a sensational wagon-record this season. Last year he trotted in a race to a wagon-record of 2:15½, and jogged the last eighth of the mile. The black stallion, Benezette, 2:25¼, owned by Mr. John E. Bole, took his record over a half-mile track. He has trotted miles better than 2:10, and makes a grand wagon horse. Other fast ones owned by members of the Pittsburg Club, are Visalia, 2:12½, by Iris; Captain Caffrey, 2:16¼ (trial, 2:14¼), by Charles Caffrey; Bourbon Bennell, 2:14¼, by Bourbon W.; Albert C., 2:16½, by Clay; J. F. Hansen, 2:19¼, by Hambletonian Wilkes; Sylvia, 2:17¼, by Silver Cloud; Shadeland Norwood, 2:13½, by Shadeland Onward; Fredonia, 2:16¼, by Black Cloud; Edna Cook, 2:12, by Alcantara, and Lentolus, 2:15, by Pactolus.



J. G. Bennett,
President Pittsburg and Alleghany
Driving Park Association.

There seems to be a very great difference of opinion among the various driving clubs as to what constitutes an amateur driver. I am in receipt of half a dozen letters on the subject, one from an old organization, and the others from newly-established ones, asking OUTING



"Ember Day," 2:17 to Wagon.
J. G. Bennett, Owner and Driver.

to settle the dispute. As custom makes a law, in the absence of legislation, it is only necessary to refer to custom among the other recognized amateur sports. An amateur driver, therefore, may be defined as one who has never entered a contest against professionals, for prize or profit, nor ever driven for a purse or for hire. There can be no exception to the rule in amateur driving. Once a professional, always a professional. I recognize the fact that this will bar out many estimable gentlemen, but I do not see how the sport is to be kept clean if a man can be a professional to-day and an amateur to-morrow.

Driving clubs in search of new features might well try races for women drivers. In almost every club there are women who enjoy the sport as much as do the men, and are quite as skilful. No doubt, it would add interest to the matinées if a single event were occasionally set aside for ladies exclusively.

Another good feature would be a handicap race, on the Austrian style, i. e., from a standing start. This would require very careful work on the part of the handicapper, and he should be guided entirely by the wagon records of the horses.

I think, too, the amateur clubs can well revive racing under saddle. It is a very pretty sight, and would certainly add pleasing variety to a programme.

Then, again, there are now so many very fast horses owned by members of matinée clubs that, after the season has advanced far enough for the good ones to be in condition, there should be regularly advertised efforts to beat the present world's records.

The rapid extension of matinée driving clubs

throughout the United States naturally suggests the desirability of a national organization. The clubs have to a great extent adopted the rules of one of the two professional organizations, and some have even taken out memberships in one of those associations. These rules are inadequate, and membership in a professional association, even for protection, is undesirable. Amateur drivers should have a national organization.

In the death of that rare trotting champion, Maud S., 2:08¾, light harness racing has lost one who brightened many a page of its history. She was in her youth, the one particular star in the stable of Mr. William H. Vanderbilt, who sold her to Mr. Robert Bonner before she won her greatest laurels. Maud S. died the property of Robert Bonner's Sons, and was buried with due ceremony by the side of that other illustrious hero of the trotting turf, Dexter, 2:17¼, at East View, N. Y.

It has long been my opinion that horse show associations should either bar professional exhibitors or put them in "dealers" classes. The amateur, selecting his exhibits from a necessarily small stable, has little chance of winning in classes where the large dealers participate. Moreover, I cannot see how it adds to the interest in horse shows to have professional dealers winning a large majority of the prizes. The Philadelphia Horse Show Association is, I believe, the first that has eliminated the professional feature, and I prophesy that it will thereby largely increase both its entry list and attendance.



Charles Donnelly, Pittsburg,
Owner, driving "Curta," 2:13¼.

The club-house of the Parkway Driving Club, of Brooklyn, N. Y., is well designed, its grounds are beautiful and its half-mile track one of the best in the country. Its meetings are annually most interesting, and yet the attendance at Parkway is never sufficient to justify the usually elaborate and expensive programme arranged.

NATHAN A. COLE.

AMATEUR PHOTOGRAPHY.

THE TELE-PHOTO LENS.

ALTHOUGH the tele-photographic lens has been before the public for about ten years, it has been by photographers generally regarded as suitable only for the kind of work indicated by its name, "far" photography, or the photographing of distant objects, and has been practically neglected. That it has been so is a pity, as while it is unique in its suitability for the requirements of the naturalist and the sportsman, it will do everything as well as, and some things much better than, any of the ordinary types of lenses.

I notice this now, for the purpose of directing attention to *Telephotography*, a book recently given to the photographic world by Thomas R. Dallmeyer, and published in this country by Longmans, Green & Co., in which, both by precept and example, by illustration and clearly written description, the nature and properties of the tele-photo lens are shown.

The tele-photo lens consists of a positive lens (it may be either single or double), and a negative lens of shorter focus placed behind it in a tube with rack and pinion; and it differs from all other lenses, in that, while the focus of the latter is constant, that of the former is variable, depending on the relative positions of the three points—the positive lens, the negative lens, and the plate—or the distance to which the camera is drawn out. By this arrangement the focus is projected to a point considerably in advance of the positive lens, and the magnification or size of image is equal to that given by a positive lens of that focus.

In this way—while the naturalist may photograph a bird on the nest without going near enough to frighten it, or the geologist any particular stratum on an inaccessible rock—the professional photographer in the studio may make a life-sized head with a lens that, without the tele attachment, has a focus of less than ten inches, reproduce the hands in any desired position in something like their natural size, and secure perspective that not only is but "looks" correct.

TRANSFERRING CLOUDS TO NEGATIVES.

The greatest attraction of a charming landscape is a beautiful sky, but rarely can the ground and sky be photographed together, and when they are it is rarer still that the clouds are at their best. Various methods are employed

for printing in clouds from separate negatives, all more or less successful, but all involving considerable work and great care. Where a number of prints are required the labor is much lessened by transferring the clouds to the negative and so printing both together at one operation, instead of printing from separate negatives. Such transferring, hitherto a difficult operation, is so simplified by P. Rowe's method that with a stock of his cloud negatives a "bald-headed" picture need never be sent out.

The first step is to select a suitable negative, one with an opaque sky, and soak it for ten minutes, or until the film can be removed from the glass, in a 20 per cent. solution of sodium sulphite. The separation is most easily effected by gently raising one corner and going all around the edge, and then working towards the centre. The stripped film is well washed, and it and the landscape negative are soaked together in water for a short time. They are then drawn out together, film to film, and squillgeed, care being taken to remove any air-bells that may have formed. Before commencing, the following solutions should have been prepared:

- | | | |
|----|-------------------------------|-----------|
| A. | { Potassium ferricyanide..... | 15 grains |
| | { Water..... | 1 ounce |
| B. | { Sodium hyposulphite..... | 50 grains |
| | { Water.... | 1 ounce |

Mix just before using, and apply with a brush, a tuft of cotton, or a small piece of sponge, all over the sky, taking care no sharp line of demarkation is allowed at the horizon. Occasional examination by transmitted light will reveal the progress of the process; and when the transference is complete, or clouds of the required density are obtained, separate the film from the negative and wash till the yellow color disappears.

Obviously this is not a case of real transference, but answers the same purpose. The reducing agent acts equally over all the surface; and where, in the cloud negative, there is a deposit, the agent expends itself on that, but where the negative is transparent, or even translucent, the agent passes through the film and acts on the even sky of the landscape negative, converting what would have been an intolerable white-paper sky into beautiful "castles in the air."

To do this well needs a little practice, but with practice the process will be found very much easier than it seems to be from the description.

DR. JOHN NICOL.

NOTABLE PERFORMANCES AND RECORDS.

CONDUCTED BY WILLIAM B. CURTIS.

AT the New York Sportsmen's Show, held March 1st to 17th, in Madison Square

Garden, several new swimming records were established. The tank was 75 feet long, 30 feet wide, and 6 feet deep, the water fresh, and kept at a temperature of about 75 degrees.

W. E. Dickey, of New York Athletic Club, just equalled the plunging record of 58 feet, held previously by F. J. Wells and G. B. Clark.

E. C. Schaefer, American champion and record-holder at almost all distances, was somewhat stale after his unusual exertions during the Boston Sportsmen's Show, and did not equal expectations in some of his performances though winning five championship races—among them, the fifty-yards swimming on back in 36 1-5s., beating by two seconds his own American record, and he won the 125 yards with four turns, in 1m. 30. 1-5s., establishing, in the absence of a previous one, a fresh American record by default.

The most notable recent indoor performance was the hurdle race at the annual games of the Thirteenth Regiment, N. G. S. N. Y., held March 10th, in their armory, Brooklyn, L. I. In the final heat A. C. Kraenzlein, Pennsylvania and the New York Athletic Club, starting from scratch, and giving two opponents ten yards, won easily in 15 1-5s. without touching a hurdle. The race was over substantial hurdles set upon the board floor of the drill hall, straightaway, the competitors wearing sprinting shoes with short spikes. The timekeepers were recognized experts of national reputation. The course was 120 yards, and each of the hurdles 3ft. 6in. high, all of these measurements having been verified by the officials after the race, and no record ever made is less liable to question. The time, 15 1-5s., has never been done indoors before, and never anywhere except by Mr. Kraenzlein, who first made it on the Parkside track, Chicago, Ill., June 18, 1898, in a match between Chicago A. A. and N. Y. A. C. teams.

Kraenzlein is a fair-haired lad, nearly six feet, but looking an inch shorter on account of a slight stoop. He is not heavily muscled, and exhibits none of the points usually supposed to accompany great athletic ability. Yet he holds the world's records, amateur or professional, for the 120 yards (high) hurdles, the 220 yards (low) hurdles, and for running long jump. If he would give up hurdling and practice sprinting for one season, he would no doubt be enrolled as the world's record holder

at 100 and 150 yards, if not also at 220 yards running.

At the same meeting with Kraenzlein's hurdle race, A. C. Duffey, of Georgetown, ran an exhibition sixty yards on the board floor, and, after trials in 6 3-5s. and 7s., finished the third attempt in 6 2-5s., just equaling the record previously credited to himself and J. W. L. Tewksbury, Pennsylvania; but, as the affair was only an exhibition, the record cannot be allowed under the rules of the Amateur Athletic Union.

The fifty-seventh annual race between eight-oared crews of Oxford and Cambridge Universities was rowed, March 31st, over the usual course, from Putney to Mortlake, 4 miles 380 yards up the Thames River, with a flood tide. The weather was fine, the wind light, the water smooth, and the tide an unusually swift flood. Cambridge was a strong favorite before the start, and justified public opinion by winning easily by twenty lengths, an interval which would have been lengthened had not the winning crew eased perceptibly near the finish. The time, 18m. 47s., just equals the previous best-on-record made by Oxford, March 22, 1893; but the shifting conditions of tide, wind and water render times over this course practically valueless for purposes of comparison, and it is probable, considering the fast tide and fine weather of this year's race, that better crews than Cambridge, 1900, have won and lost in slower time.

The following are the important recent decisions :

Amateur racquet championship of America (B. A. A. courts)—Won by E. H. Miles over Q. A. Shaw, Jr., 15-4, 11-15, 15-5, 15-3.

Court Tennis U. S. championship (N. Y.)—Won by E. H. Miles over — Stockton, 6-0, 6-2, 6-2.

Inter-collegiate fencing championship, March 31, N. Y. Racquet Club—Won by Harvard with score of 23; Annapolis, 22; Cornell, 21; Columbus, 20; Yale, 4. Individual honors—A. E. Wieland (Cornell), 11; S. L. Ware (Columbia), 10; H. Tamura (Annapolis), 9.

Amateur Hockey League championship (N. Y.)—Won by Crescent A. C. team.

International Exhibition Hockey (N. Y.)—Ottawa defeated All Manhattan.

Grand American handicap and silver trophy of the Interstate Association, Interstate Park, Long Island; 208 entries—Won by H. D. Bates, Ridgeton, Ontario, by 34 birds straight.

Inter-collegiate gymnastic championship (N. Y.)—Won by Columbia, with 26 points; Yale, second, 17 points; Harvard, third. Individual point cup—Won by J. de la Fuente (Columbia), 109.91 points; E. L. Eliason (Yale), second, 106.56 points.

Oxford v. Cambridge inter-university track games, Queen's Club grounds, London, March 30. Oxford defeated Cambridge 6 events to 4.

Oxford won—100 yard dash, time, 10½s.; Hammer throwing, 115 ft. 2 ins.; Long jump, 21 ft. 8 ins.; Quarter mile, 50 3-5 s.; Throwing the weight, 36 ft. 8 ins.; High jump, 5 ft. 7½ ins.

Cambridge won—Half-mile run, 1 m. 58 3-5 s.; Hurdles, 16 1-5 s.; One mile, 4 m. 23 2-5 s.; Three miles, 15 m. 1 2-5 s.

SPRING OUTING CLOTHES FOR SPORTSMEN.

By "How."

THERE is a popular idea that the small country boy with bare feet, a broad-brimmed straw hat, and a crooked hickory pole, catches more trout than the man in Scotch tweeds, with fishing-basket of most approved design, and a fly rod of finest split bamboo. The true reason for such a belief, however, lies not so much in the man's clothes as in the small boy's greater knowledge of trout, and the principle of it applies not only to fishing, but throughout the list of sports. There is nothing more absurd than a man in yachting clothes who does not own even a catboat; and he who would hunt would better learn to ride before he bothers himself with hunting attire.

As regards fishing, the choice of clothes is quite beyond any strict rules of fashion, but there are certain suggestions to be made which may be worth remembering.

The most serviceable hat is one of soft gray felt, with a fairly broad brim, bare of binding, which can be pulled down over the eyes or all around the head. The band should be of some very loosely-woven material, into which a hook may be stuck without its being a five minutes' job to get it out again, or of Mexican leather, through which the snell may be pulled. The hatband is a most convenient place to stick a fly when one wishes to make a quick change in the interests of a particularly attractive trout who allows himself to be seen at the bottom of some shady pool, but absolutely refuses to be tempted.

A sack or Norfolk jacket of tweed, with large, roomy, patched pockets worn over a medium-weight sweater, cut low at the neck to show the stock, knickerbockers, ribbed wool stockings or puttees and heavy tan boots make a good costume for what may be called "dry fishing," but for walking up a trout-stream, skittering, or fly-fishing in shallow water, light rubber boots reaching well up the thighs are indispensable.

For threatening weather a rubber coat which hangs low enough to cover the boot tops—that is, about half-way to the knees—is extremely serviceable. It is not long enough to drag in wading through shallow water, and yet, with the boots, gives perfect protection from the rain. As a rain coat for ordinary use I should advise Cravenette, or some other water-proof cloth, but for fishing rubber is the better.

Tennis, which for the past few years has been forced into a more or less inconspicuous position by the ancient and royal game of golf, will, it seems, this year again be given the attention it merits, and flannels will be the keynote in the scale of costume. White, gray, or striped trousers, worn turned up around the ankles, are smarter and will be more generally worn than duck, though white duck does very well for actual play. Soft-fronted madras, or percale, shirts with low turned-down collars attached, tan leather belts and hose with a stripe, clock, or small spot design will be most correct. On dirt courts low rubber-soled tan shoes will

prevent slipping, but for grass, I should advise shoes with small blunt spikes.

There is, strictly speaking, no one particular golf suit prescribed by fashion or good form. It should perhaps be noted, however, that long flannel trousers, worn with moderately heavy woolen half-hose and low tan shoes, will be smarter than knickerbockers or what have commonly come to be known as "golf trousers." Light-weight ribbed sweaters, cut low at the neck like a waistcoat, and white or colored stocks are good for early spring play, but I should not advise the silk-sleeved woolen waistcoats; and during the summer months cheviot, madras, and percale shirts with turned-down collars or stocks are almost the only thing possible. Colored waistcoats and red coats with brass buttons will no doubt be somewhat worn on club links, but are bad style, it seems to me, for general use.

Knickerbockers are most comfortable, as well as the best form, for bicycle riding. They should be cut full over the thighs, and narrowing down to the knees, where the cloth is so taken in as to fit rather tight without binding. The cuffs or extensions may be of box-cloth, buckskin, or the same material as the trousers, and should button, like riding breeches, directly in front, instead of at the side. Cloth puttees, with or without spats attached, and cut to wind spirally around the leg from the ankle to the knee, are rather smarter than the old woolen stockings turned over at the top. I should not advise having a coat of the same material as the knickerbockers, unless, perhaps, it be a Norfolk jacket. Colored waistcoats of flannel or lamb's wool, either single-breasted or of the "Cairo" shape, with converging buttons and points at the bottom, if well made, and not too bright and striking in design, are still good style for wheeling.

A smart-looking riding suit is made of check-lined materials in tones of gray and brown. The coat should be cut rather close at the waist, and with skirts hanging well around in front, so as to cover a good part of the thighs; should have four bone buttons in front, and three on the sleeves, fairly large side pockets and a breast pocket with flaps. The breeches are of the same material, with buckskin strap-pings, full over the thighs, tight at the knees, and with buttons directly in front. Either boots or leather riding gaiters may be worn with this suit, and I should advise a single-breasted check Tattersall waistcoat, cut rather high, and white cheviot stock. A derby is, of course, the proper hat. A good outer coat for riding is the full-backed raglan of unlined covert cloth.

For yachting clothes, flannels, duck, and rough grained blue serge are the proper materials. Jackets are usually made double-breasted. The regulation dark blue cloth or white duck yachting cap is still the most correct head dress, and shoes should be of tan, low, and with thick red rubber soles.



ROAD CART.

OUTING

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No. 3.

The Country- *Cart of To-Day*

By Caspar Whitney

Illustrations by Edward Penfield



VER all the world, and since the earliest writing of history, the cart has been the first wheeled vehicle of nations. Behind that we find the sledge as man's primitive carriage; and the first sledge no doubt was a forked tree-limb, which by simple evolution became a box on rollers, and subsequently a cart on wheels.

The story of the cart is not without interesting features. Periods in its history reflect the trend of popular disposition as surely as they mark the cart's structural development and its uses.

Originally, with unadorned body and heavy solid wheel, this vehicle's place in the industrial life of the people was pacific and invaluable. In the stirring days of Grecian and of Roman ascendancy, more lightly yet more securely fashioned, it flourished because best suited to war and to racing—the two absorbing interests of the times. In the era following that in which rose Pitt, Earl of Chatham—England's Great Commoner—the last quarter of last century, the cart came to be a favorite of the pleasure-loving, because of a heavy

tax levied upon four-wheelers under the impression that they were conducive to luxurious tastes and habits.

To this very day the cart retains its popularity wherever wheeled vehicles are employed; and in the lands where the modernizing hand has touched lightest, I have found the cart longest of lineage and most highly decorated of carriages. This is particularly true of Siam and Burmah and India. A more picturesque vehicle than that of the Burmese does not exist; and although the traveling cart of Northern India, the ekka, is by no means lovely, its use has long since become traditional, and it is, moreover, an amazingly handy, if uncomfortable little trap. There is yet another native Indian cart, a heavier, easier-riding one, the rekla, which, while being more comfortable, is even less lovely in appearance, and by no means so speedy a method of transportation.

Now, while there is no doubting the type and uses of the earliest carts, there does appear to be uncertainty as to whom is due the honor of being the first builders. A few historians declare the first carts to have been built in Ethiopia, and in point of fact there is some evidence to support the claim. The

majority of students and of writers, however, are convinced of the first wheelwright being an Egyptian.

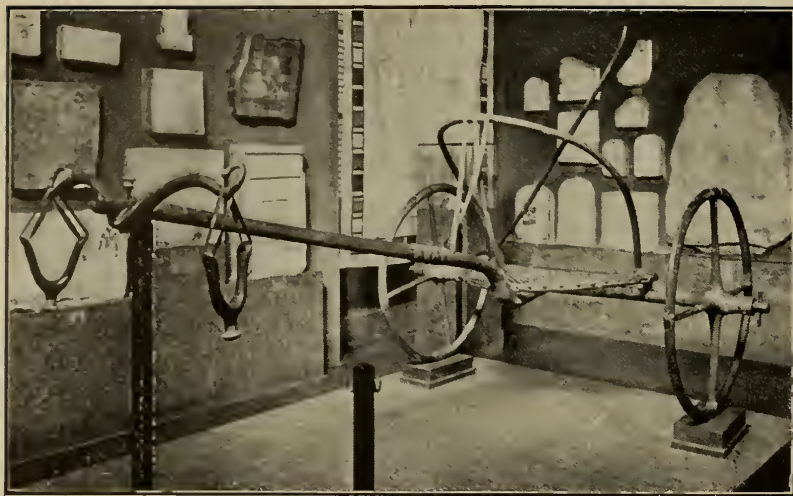
Whatever justice there may be in either claim, certain it is that if the Egyptians were not actually the first to use vehicles, their builders at least achieved the most notable results, and left the more lasting impression on the pages of history.



Bombay Rekla or Passenger Cart.

The first two-wheeled chariots on record are those to be seen on the ruined walls of the Temple of Karnak, commemorating the victories of Menepthah I, sixteen hundred centuries before Christ! Not only are these the first records of chariots, but in the open six-spoked wheel shown, they indicate the advanced skill of the Egyptian workmen.

The Tokkari people, contemporaries of the Egyptians, were vastly inferior in the construction of their carts, which were clumsy and had solid wheels, pinned together in sections. I have seen just such wheels in use all over rural Mexico; indeed, to



Ancient Egyptian Cart in Florentine Museum.

enough, too, the whips of the earliest Egyptians were quite like those of the American Indian, with wrist loop and a thong attached to a short decorated wooden handle.

The Assyrians had a start on the Egyptians of over a dozen centuries, yet their carts revealed nothing like the ingenuity shown in those manufactured by the Egyptians. The Assyrian wheel had at least eight spokes and some had as many as twelve; therefore they were stronger, and purposely so made to withstand the service of warfare, which included driving furiously over the slain and wounded of the battlefield. In respect of the wheels, generally frail and uncertain in those primitive days, the Assyrian appears to have been somewhat near the Egyptian standard, but in all other chariot-building particulars the latter's handiwork was unequalled.

In the museum of Florence, Italy, is



Burmese Cart.

within a dozen years, there were practically none others to be found outside the towns, and this very day such may be seen in the southern part of our own territory of New Mexico. Curiously



Hackney Cart.

a genuine Egyptian chariot, which unquestionably belonged to the Ptolemaic age! It is built of birch and iron, with a floor made of rushes, looking very like the cane-bottoms on old-time kitchen chairs of youthful memory. But we need not go so far as Florence to view the work of ancient Egyptian wheelwrights. There are the remnants of a wheel in the New York Historical Society rooms, New York City, found by Dr. H. Abbott, in a mummy pit at Dashour, and belonging to a period of about B. C. 300. This wheel has a wooden tire and a fourteen-inch hub, giving every indication that it rotated around the axle and not with it, as most, if not all, of the ancient hubs did; for in those times nearly all axles were not fixed, but rotary. The first carts show no iron whatever, the rims being wood, steamed and bent on.

Until the days of the Romans, carts differed not a great deal in general, except as I have said, in the number of spokes, and in slightly better work, here and there. The uniformity of design makes the tracing of one ancient chariot look much like that of another.

Grecian and Roman vehicles have been greatly confused by historians, and the former usually conceded to be the more worthy of comment, but without sufficient reason so far as I can learn. Undoubtedly the Grecian eight-spoke racing chariot was more strongly built than the first products of the Roman wheelwright, though that appears to have been an outcome of poor roads rather than of superior workmanship. In point of fact, the Romans had a greater variety of vehicles suited to many different purposes than any other of the early nations — a distinction directly traceable to the superiority of their roads. The first Roman vehicles were indeed less of a chariot in the Grecian sense and more of a cart as we understand it; later, when the racing began, the chariot was patterned after the Grecian, but finally developed into a national and more ornate type.

But we cannot, of course, attempt to follow the cart throughout its entire evolution, from Egypt to Rome, to the British Islands with the Romans, and back again to the continent; it is enough for our present purpose to know that in

one form or another the two-wheel cart was the standard vehicle of ancient days.

Shifting somewhat abruptly, therefore, from those ages long gone to comparatively recent times, we come to England and to the two-wheel chaise— unquestionably the modern forerunner of our cart of to-day—which succeeded the post-chaise of four wheels, the only conveyance of the road before 1630.

Following this two-wheel variety, and, so far as my investigations prove, I think rightly in sequence, was the English gig, which made its first appearance in 1754, and is the origin of the present stanhope and tilbury. Its body rested in front of the wheels on long shafts, and at back was hung on leather straps pendent from iron braces, springs not having become customary on two-wheeled carriages. From this type, too, is descended the Spanish volante, which exists to-day as it did a century ago—practically unchanged. It has no straps at the back, but the body rests farther forward on the shafts, and thereby acquires some of the elasticity of the buckboard. This early gig was also the type from which the Norwegians took their native cariole—which is part chaise, part cabriolet, with more elongated body.

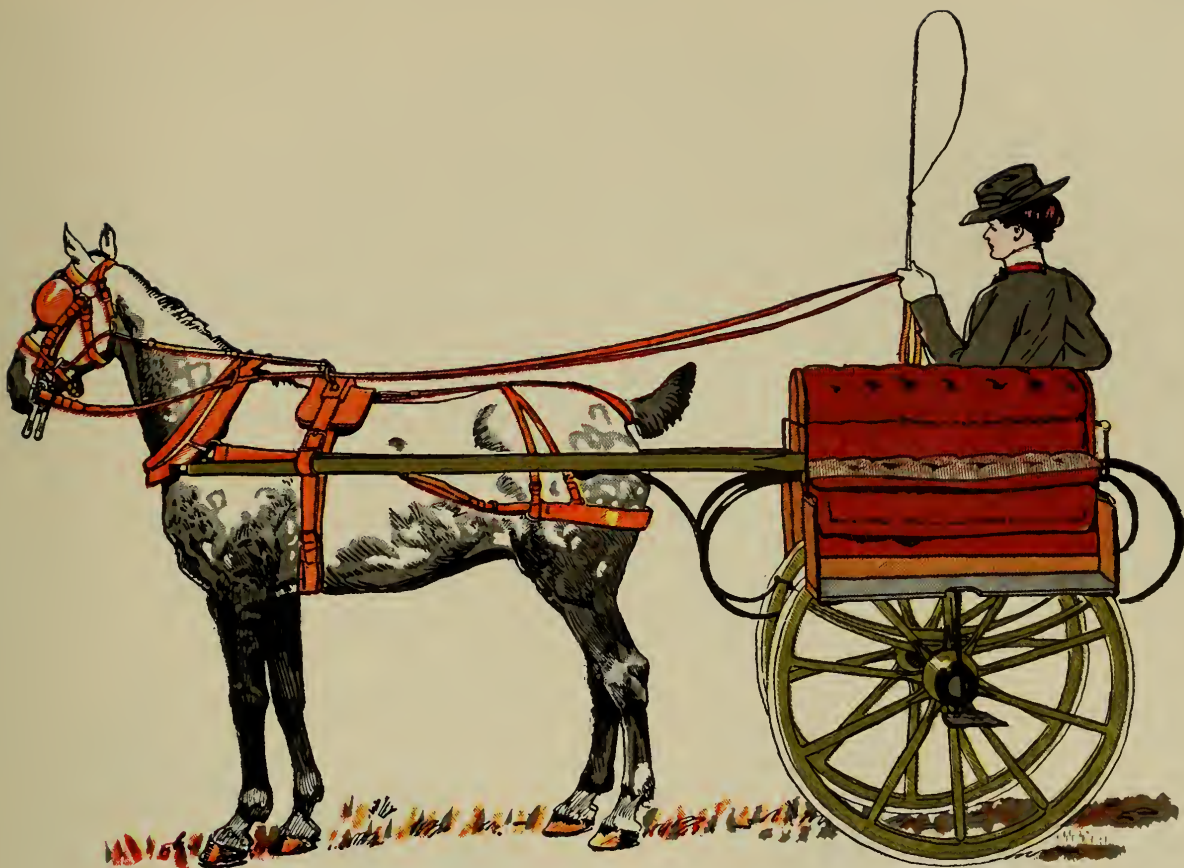
Meantime, some carriage-building was

being done in France and in Italy, which I shall not explore, however, since in general only fleeting impressions were made upon the cart in its evolution, except by one coming from Italy, and giving form to the curricule that followed close upon the English gig of 1754. This was quite the most attractive and the most practical cart of that period, and indeed the first to embody the principles of present-day wheelwrighting. It became immediately popular, and in the end so extremely fashionable that its price ranged as high as five hundred dollars—an enormous figure in those days of simple and inexpensive tastes. It was very lightly constructed and of two patterns: the curricule proper, for two horses, and the curricule gig, for one horse. There was practically no difference in the two models; the body of the gig being perhaps a bit shorter, but the other being the one affected by fashion, because its two horses lent ostentation not given by the single-horse gig. In principle this curricule was the prototype of the one in use to-day; but in common with all the early gigs and chaises, its body, though not so ugly as those of the others, was yet far from seemly.

Hitherto the wheelwright had concerned himself chiefly in developing a



Kentucky Breaking Cart.



Jaunting Car.

practical cart which would be fairly comfortable for the passengers and light on the horse; but in this period his attention appears to have first become directed towards improving the appearance of the carriage. One of the earliest tangible results of the refinement of the gig-curricule-chaise type was the stanhope, first seen in about 1815.

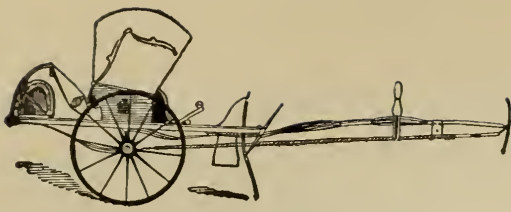
But the stanhope, as then produced, had only a short-lived popularity, owing to its employment of cross springs for the first time, which made it too hard on the horse; and the tilbury, which appeared about ten years later, had only a temporary vogue for the same good reason.

Perhaps the most important refinement at this period of the gig type, and the one that left its impress indelibly upon modern two-wheeled vehicles, was a cabriolet, invented by a Frenchman—Colonel Grobert. The objects he sought in this cart were to impart elasticity in movement of the vehicle when loaded, thereby lightening the draft on the horse, and to lessen the chances of upsetting, by lowering the centre of gravity. Although never generally accepted in its entirety, yet the principles this type embodied were recognized as desirable, and checked for a time the

prevailing tendency to high and hard-drawing carts.

It has never been satisfactorily determined, I believe, whether the going-to-cover or dog cart, one of the early evolutions from the chaise-gig type, was a French or an English invention. The fact that it had its origin in hunting rather than in mere pleasure driving, would suggest English origin; yet it is true the French were more active in carriage-building at the beginning of the present century (1800) than the English, although, on the other hand, an elaborate history of French carriages published in 1780 makes no mention of this cart.

The very early English makers turned their fancy to four-wheelers; so that style became the popular one, and would no doubt have remained so, out of respect to national tenacity to tradition, if for no other reason, had it not come to be regarded as a breeder of luxurious habits and taxed accordingly. Thus it happened that, in order to evade the tax, two wheels were disused, and the cart became the vehicle first of the economical, and subsequently, when its possibilities were appreciated, of the sport and pleasure seeking.



Curricie Proper.

Outing for June.

So it happened, too, that an era of freak

carts was soon inaugurated.

Whatever doubt may exist as to the origin of the dog cart in the early part of 1800, there can be no disputing the French nativity of the tandem cart with groom's seat, which dates from 1845.

Continued efforts to refine the original gig-curricie type resulted finally (1836) in one with body set lower, which proved to be the lightest one-horse vehicle in England, and promptly superseded all others. It is this gig that is the model of the one in use to-day—by all odds the easiest on horse and man and the handsomest thing on two wheels.

Two other carts of a decided individuality made their appearance at about this time (1834)—the hansom and the jaunting car. The former was the patent of Joseph Hansom, and in its first form was a body (in general, similar to the one in use to-day) hung from an axle which connected two great wheels,

the latter reaching to the top of the body and the driver's seat being in front. Gradually this form was modified until it became that of the present, which, in England and America, is most popular of all public conveyances. The jaunting car owes its origin to the sociable nature of the Irish. It will hold four or six quite as comfortably as two, and is one of the most serviceable and thoroughly practical carts in existence. It is very strongly put together, and yet light in construction, and very easy on the horse. For knock-

ing about the country it excels any other cart that has come to us from

European models.

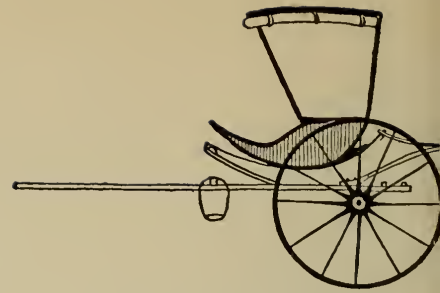
We may now consider the cart to have attained a definite position

and form in Great Britain and in France, and look into the situation in the United States. The first wheelwright came to America in 1629, while post-chaises (four-wheelers) were popular in England and at just about the début of the two-wheeled chaise. Therefore, carts were few and far between in the new world, and remained so for various reasons, not the least potent one of which was the disinclination of the colonial officials to make driving tolerable, not to say pleasurable. So late as 1784, in New York city, carts were not permitted to

have iron tires for fear of injuring the roadway. Thus it may be presumed the wheelwright did not prosper unduly; in truth, there were just six carriage-builders on the island of Manhattan in 1788.

Yet despite the lack of building incentive, there did develop, in

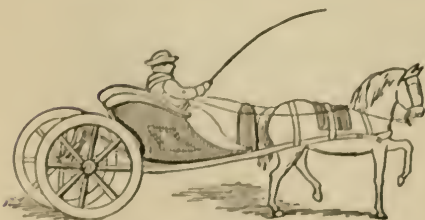
1790, from the English gig-chaise-curricie form, a type of two-wheel vehicle which Oliver Wendell Holmes has immortalized as the "one-horse shay," and which must be regarded as the first American effort at carriage-designing. Although fashioned somewhat after the curricie, it, nevertheless, had enough individuality to be classed separately. It was variously called a chair, or cheer, or chaise; and its body hung from springs made of wood, "with rude bow or standing tops of round iron, hung around with painted cloth cushions," and the linings and cushions were stuffed with salt hay. It was so serviceable, and



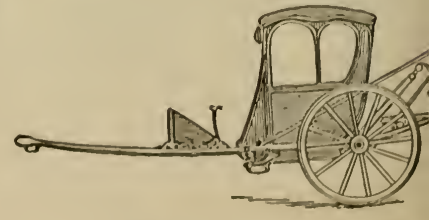
American Chaise, 1790.



The Ekka, Travelling Cart of Northern India.



English Gig, 1754.

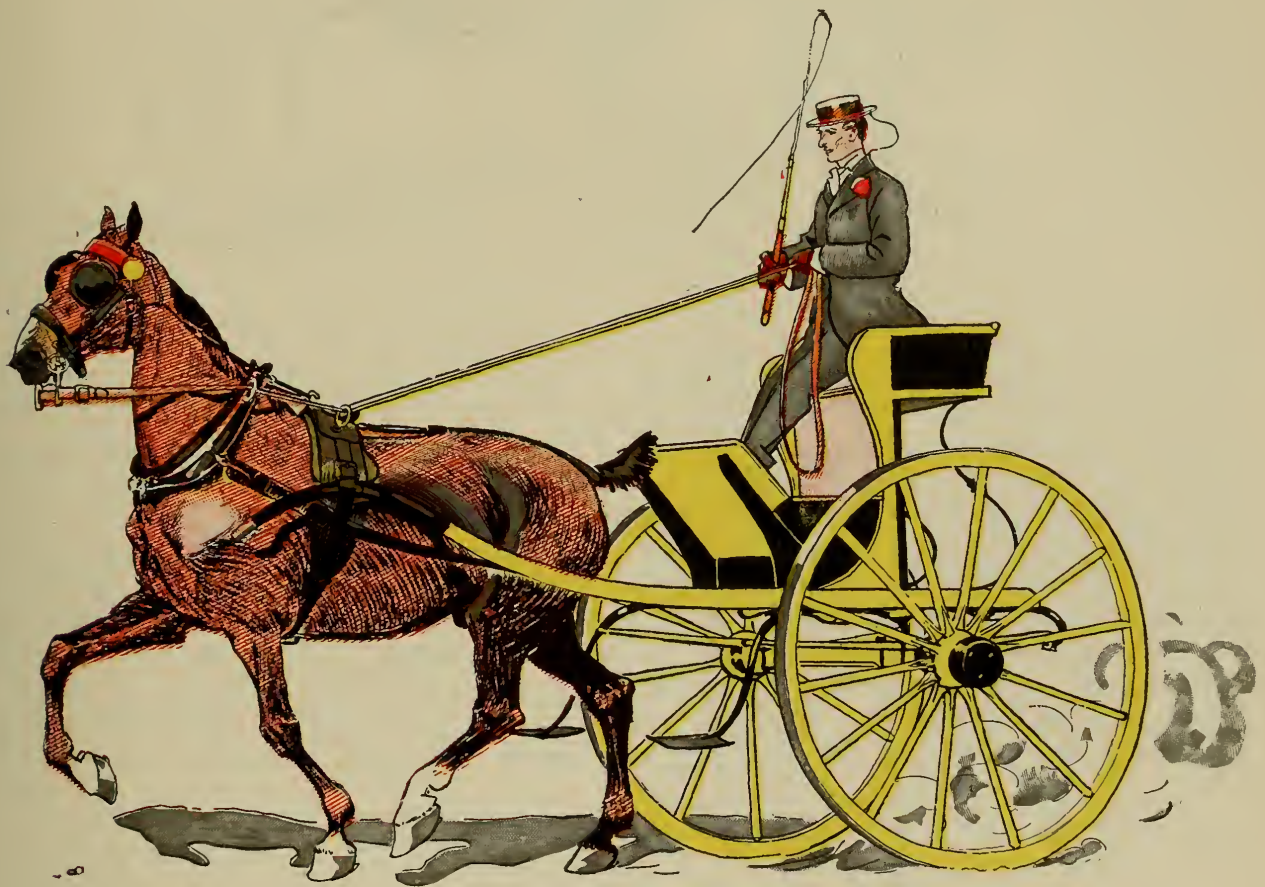


English Chaise, 1664.

withal so comfortable an affair, that it acquired ready popularity and became in town and in the rural districts quite the vehicle of the period. In Philadelphia, especially, the chaise attained unusual vogue, there being no less than 520 in the "City of Brotherly Love," when Congress, viewing all carriages as articles of luxury, imposed a tax upon them in 1794. Philadelphia enjoyed considerable carriage-building distinction in those days, for it was in 1790 that one of its wheel-

statement that they fell short of the originals in beauty of line and in quality of finish—a to-be-expected result, considering the crude conditions surrounding the manufacture of carriages in those days, which made the wheelwright his own draughtsman.

The simple and somewhat severe lines of the chaise were within the early American builder's range, and he had made a cart equal to the best, but the curves of a cabriolet were beyond him.



Horse-Show Skeleton Gig.

wrights, David Clark, constructed the first American coach.

An immediate activity in building followed upon the withdrawal of the carriage tax in 1801; and among the various results of much experimenting were the first two really distinctive American carriages—the buggy and the sulky. The latter, however, is American only through the accident of manufacture, for it was the invention of an English physician residing in New York. With these as a beginning, experimenting continued, until in 1826 was evolved the first American gig—the chaise having by that time almost entirely lost its vogue—and shortly thereafter a cabriolet. Both of these were patterned after English models; and candor compels the

So he turned his attention to buggies and to other four-wheeled carriages, in which types with their less trying lines of beauty he speedily attained high rank.

From the twenties up to and through the Civil War, there was very little two-wheel cart building in America, almost none in fact, and, of course, equally little of that kind of driving. So far as I can discover, the cart owes its return to favor in America to Mr. Burton Mansfield, an Englishman, who came over about the close of the war, and brought with him a cart called the whitechapel. From this beginning sprung the Tandem Club, and with the annual meets of this organization, the number of carts quickly increased. From being at first all imported, they were finally supplied



Hempstead Cart.

by American builders, who had become justly considered equal to the best.

But the present very considerable vogue of the two-wheeled cart dates from the beginning of the New York Horse Show and the dawn of the country club, which have brought the joy of country living and the out-of-door spirit to the present generation of Americans. Indeed, the Horse Show may rightly be said to be the beginning of general American education in carriages and appointments and in heavy harness

horseflesh. We have always had the best of horses, but, except in trotters and, in the South, in saddle animals, never knew until comparatively recently quite how to make the most of our native stock.

The whitechapel was the sign manual of the Tandem Club, and for several years the standard of two-wheel carts. Then there came a time, about ten years ago, when seeking to outdo one another in reproducing monstrosities, men searched the old print shops of



Stanhope Gig.

London for types of carts which never existed except in the artist's fancy, and we had a period of freak and hideous two-wheel vehicles. All of them, in addition to being unsightly, were extremely hard on the horse, and impracticable. The whitechapel was sufficiently unattractive, but the cocking carts and the Horse Show skeleton gigs and the hybrid going-to-cover carts were the whims of men who thought their degree of "smartness" rose with the elevation of the cart seat.

The driving of such a cart nowadays, stamps a man as new at the game and sadly in want of competent instruction.

With the passing of this freak class came the popularity of the stanhope gigs, and the curricie—handsomest and easiest on man and horse of all the modified dog carts and gigs—rechristened as frequently as suits the builders, but all observing the vital principle in a good road cart, of having the centre of gravity as low as compatible with the individual style of the vehicle.

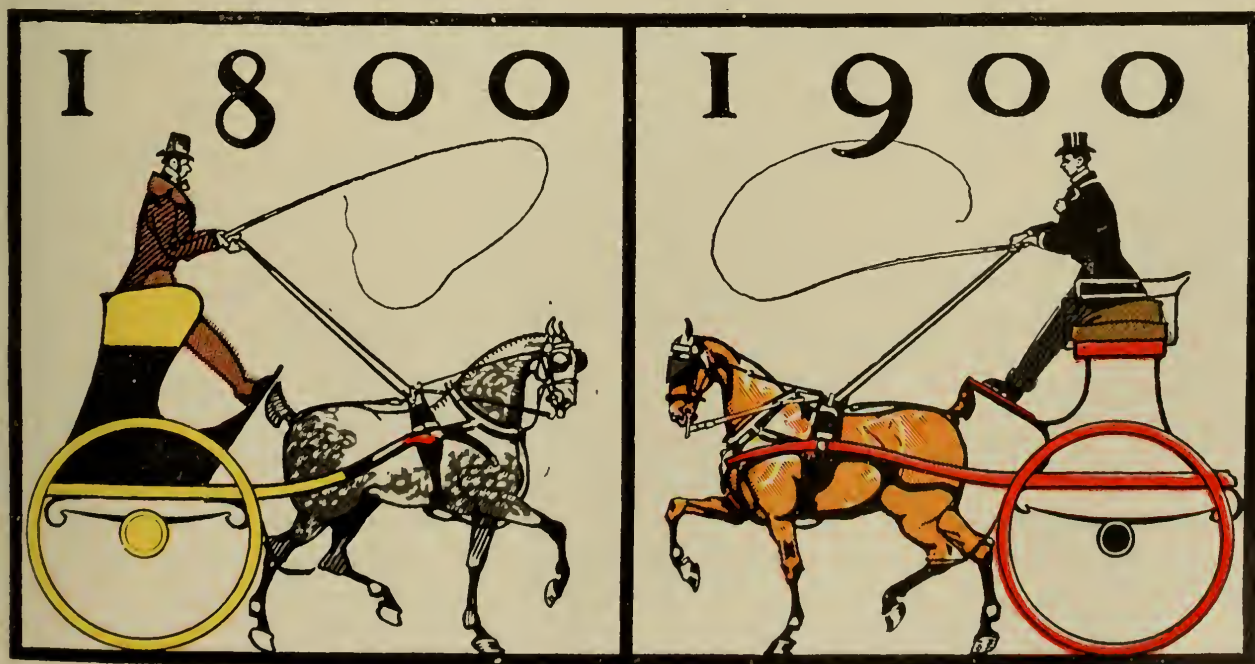
At best a two-wheel vehicle is unsuited to the hilly roads of the country, and the very high carts are simply crushing upon the horse. Of carts for strictly country use—taking all kinds of roads as they come—there are none, for ease on the horse and comfort of the passenger, to equal two strictly American inventions, the Kentucky breaking cart and the Hempstead cart. Each owes its existence to the necessities of usage, and conditions of the road, and, like all inventions of such parentage,

both are thoroughly practicable and serviceable. There are other and many carts of native manufacture equally good; and, in fact, it is not inopportune to say here that in no country in the world is the standard of excellence in carriages so high or the variety so great as in America. In this line, as in every other, the American manufacturer has attained the lead, helped somewhat by our native woods being the most enduring and the lightest.

From entirely unpretentious beginnings twenty-five years ago, we to-day not only manufacture the best carts, but turn out more of them in the best form. I have seen nothing in England or France in individual excellence to surpass, and nothing in general form and numbers to approach, our country-cart showing on the roads about New York, Boston, or Philadelphia.

But the last quarter of a century is responsible for a greater evolution than that in this land of ours—it has converted America to the belief that all work and no play makes a dull boy of Jack—it has witnessed the American laboriously learning how to play.

Full enjoyment of joys is not altogether an attribute of the American; he is more than likely to steal away for his holidays with a portmanteau full of work. But he is learning—perhaps his pursuit in its early stages is somewhat vigorous; yet he is growing more and more to submit to the blessings of the out-of-door spirit which has descended upon us in the present generation.



EVOLUTION OF THE TROUT AND ARTIFICIAL FLY.

By Harry Gove, M. D.

RETROSPECTIVE glances, as a rule, are not so pleasing as prospective ones, but they must always be the more satisfactory, as



Fig. 1.
Fly for Short-rising
Fish.



Fig. 3.
Jenny Lind, a Lake
Trout Fly.



May-fly.

and responsive echo in the world around. The grand and heroic in our heart finds its most fitting symbol in the wildest tract of desert and of forest realm.

Down the long valley, like a silver thread, the river, as in days of yore, is rippling to the sea; past the long unused mill, by flowery meads, through lonely woods, it sparkles on its way, apparently unchanged as when in the morn of life we trod the charmed pathway of its impetuous source. But Time has dogged our every footstep by the bank, hurried us along out of the clear sunlight of the vigorous years into the dim and uncertain shadows at whose exit, like it, we must merge into an infinite ocean, unbounded by a shore.

Yet, passing down this stream we have learnt something: there are secrets in its pools and sermons in its eddies, well worth the attention of both the lover of nature and the sportsman. The pools are as serene and placid as they were thirty years ago, and the inhabitants of this watery community linger yet around the selfsame coigns of vantage as did their ancestors. But beneath this apparent serenity there lurks an unseen something, terrible and portentous. It hovers around its shallows, and is the haunting spirit of its cascades; the torrent voices the warning that echoes in its eddies; the nervous filaments of its denizens are throbbing with a newly communicated force and acutely responding to the sensation of danger.

It is a law of evolution, in the struggle for life, that only those survive who possess the greatest constitutional vigor, combined with a quick perception of the injurious. It is equally true that Nature throws her mantle of protection around all animate forms, in proportion to their needs; and of necessity it follows that each succeeding generation inherits in a marked degree the acquired wisdom of its progenitors.

Time was, when to the sensibility of the trout a glittering and unknown object was not associated with danger; his nervous organization responded only to the swoop of the eagle or the sudden attack of his larger and more voracious kinsmen: he had yet to learn the deadly significance of the artificial lure. In the clear chalk-bottomed rivers of England

he has quite or nearly mastered the knowledge and avoids the lure ; and at the present time his proficiency is a well-marked factor in American waters.

In no country has the manufacture of the artificial fly attained such proficiency as in Great Britain, whether we consider the manual dexterity displayed in its construction, or the cleverness of its conception. As a proof of this let us examine a beautiful and minute scale-wing gnat of English manufacture, and compare it with the description of a fly used in that country, in the fourteenth century, in a treatise on "Fysshynge with an Angle," by Dame Juliana Berners. The original edition bears on its title-page the following : "Emprinted at Westmestre by Wynkyn de Worde, the year of Thyn-carnacon of our Lord 1496." This Diana of the past advises her readers to fish for trout in "lepyng time," giving directions for the manufacture of twelve different kinds of "'dubbes' for troughte and graylynge." In this brochure the "doone fly" flashes out with the radiance of a bright and particular star, and is to be tied as follows : "The body of black woll, the wynges of the blackest drake and the jay, of the wynges and under the tayle." From this it will be fair to assume that not only has the condition of the trout materially changed, but also that the artificial fly has kept pace to a great extent with the increased perception of the fish.

Of necessity the remarks I shall make on the Evolution of the American Trout must bear a general and not a purely local construction ; and as most of the waters accessible to tourists have been persistently fished of late years, the embodiment of my ideas will be applicable to these.

It is a characteristic of the Salmonidæ in general that when once attracted by an object and possessed of a desire to seize it, the action is performed with the rapidity of lightning and with unerring precision : a sudden flash warns the fly-fisherman of the instant necessity of the wrist movement which secures the fish.

In all streams and lakes the fish adopts this method in both the capture of the minnow and the natural insects on the surface. It is a necessity of his existence, his food largely consisting of winged and agile Ephemeridæ and of the smaller varieties of fish, every whit as well en-

dowed as himself with protective powers against predatory foes.

Of late years there has appeared a new and constantly increasing difference in his method of seizing the artificial fly, in contradistinction from the unhesitating certainty which signalizes his capture of a natural insect. This phenomenon I consider well worthy attention, as it seems to possess the peculiarity of being performed without volition. It is illustrated by the movement known as "striking short." In fact, just in the very act, so to speak, of taking the artificial fly, he is suddenly arrested.

It is paralleled by the instantaneous and instinctive closing of the eyelids, in the human being, to exclude apprehended foreign and deleterious substances.

Fig. No. 1, which is reproduced from "Fishing Tackle: its Materials and Manufacture," by John Harrington Keene, represents a fly designed for meeting the eccentricity of the "short strike." The length of the attached hook measures the supposed distance from the fly at which the fish is arrested. I here append Mr. Keene's remarks : "We have a fly made with the addition of a small hook attached behind it ; and I have found this arrangement a very effectual one, when the fish are 'rising short,' as it is termed, that is when they rise at the fly and do not take it."

Nerve cells have the property of storing up impressions, which reproduce themselves under the excitement of a certain stimulus, although we cannot always determine just what influence sets the magic thrill in motion. The impossibility sometimes of calling to remembrance a name or the refrain of an old and once familiar melody, is known to all, yet when we least expect it, and without effort on our part, we hear the throbbing of the song and catch the whisper of the long-sought name. Admitting it to be a fact, that the wondrous labyrinth of perceptive cellular tissue is frescoed throughout with pictures which vanish and return, there is ample reason to suppose that the delicate organization of the trout has accumulated impressions of an unpleasant character, which sometimes voluntarily, frequently not, are called into vigorous action by the external stimulus of unlife like motion, color, or shape, or by their combinations.

Here, then, we have the secret which

is the fortress of the trout's strength, the redoubt against which the forces of imperfect art hurl themselves in vain assault.

It is half the battle when the strength of the resisting capability of the enemy is apparent: the remaining part must be won by correct and well-concerted attack. No one can for a moment imagine that any of the Salmonidæ, endowed as they are with keenest vision, ever mistakes the colored monstrosity, usually exhibited in the make-up of the so-called artificial fly, for any animate object. That he frequently grasps it is not to be denied, but it is to be remembered that he will not do so, except it be fashioned to somewhat resemble some form of insect life. The importance of shape in the construction of the artificial fly is here so clearly outlined that even at this stage in our considerations it stands on a parallel with color.

In order to elucidate the argument I wish to sustain, it will be necessary to consider at some length the effect of color on the nervous organization of the trout. Does the vision of color impart to his sensibility a pleasurable sensation or the contrary? To this question I should most decidedly reply in the negative.

Agreeable sensations certainly make themselves apparent by motions and actions we term play; and all practical anglers know the absolute and certain failure which attends upon the presentation of a fly, gaudy or otherwise, to fish that are aimlessly leaping and schooling over a sheet of water—in fact, at play. The effect of color on some of the lower animals seems to excite in them vindictive tendencies. The matador in the arena shakes his gaudy cape to infuriate the bull; the gobbler and the gander in like manner notably respond to the sight of color. It does more than excite the trout's curiosity: it is the

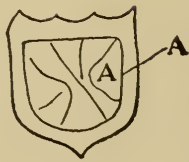


Fig. 4.
The Scale of
a Carp.



Fig. 5.
The Method of
Cutting the
Wing.



Fig. 6.
Scale Mem-
brane Wing.



Fig. 7.
Gut-bodied
Scale-wing
Fly.



Fig. 8.
Dressing of Fish-
scale Fly on
Eyed Hook.

stimulant to a vicious attack. Of all colors producing this effect scarlet stands pre-eminently first, for the reason, I think, because it makes of any of the pigments the most decided and lasting impression on the retina, and in this continuance of sensation lies its irritating power. Through the medium of the colored fly, we appeal to the fighting instinct of the trout, and are successful just in proportion to the ability of the fish to overcome newly acquired and ever-increasing power of resistance.

To make this system of angling successful the application of color in the flies to be used must be made without stint, combining it at the same time with one or more of the characteristics of the artificial fly tied to represent nature. There are in fly-making, for the purposes now under discussion, two requisites of paramount importance: one that the fly shall float, the other that it assume a shape totally different from that of the fly now most commonly in use. It is also a point especially to be remembered that undyed feathers alone should be employed. The deposition of chemicals in artificial coloring, while imparting to the eye the appearance of what is known as color, makes them devoid of iridescence.

Fig. No. 3 is a lake trout fly known as the "Jenny Lind," tied by me to meet the present condition of the evolution in the trout, as well as in illustration of the foregoing remarks. Tail, scarlet and yellow; body, cork, wrapped with yellow floss silk; ribs, silver tinsel; hackle, scarlet ibis; wings, macaw; head, peacock herl. There is no question as to the superiority of this method of tying over that now in use. It will certainly more than double the catch of fish, and it is one of the best patterns for the purpose under consideration. It perhaps may be properly termed composite, be-

cause it possesses the brilliant and attractive features which arouse animosity, while its natural appearance and buoyancy counteract to a great extent the acuteness with which the fish are now recognizing its presentation as a danger signal.

I am quite aware that the idea which I have endeavored to elucidate (in the imperfect manner a short article will allow) is not in accordance with the views expressed by a number of writers on the subject; but in no argument which I have had the pleasure of perusing has the negative been sustained by scientific reasoning. The best one, I think, attributes the seizure of the gaudy artificial fly, by the fish, to his predatory instinct. At the first thought this is extremely catching, but a consideration of just exactly the particular part that predatory instinct plays in the nervous organization (and it is an unerring one) reveals the "little rift within the lute." The predatory instincts of all animals are implanted in them by nature as a guide to the selection of proper articles of food, and these are continually influenced by sensations, to which instinctive efforts are attached, *i. e.*, by appetites, in the selection of food, which in general can be found and seized without difficulty. This instinct protects the bird in his discrimination in the selection of the harmless berry in preference to one containing a toxic element, although the latter may be a counterpart of the former in color, shape, and size.

In the Carnivora, where the predatory instincts are developed in the extreme, the impulse of the force is not sufficient to induce an attack on a cobra or other deadly reptile; it will do so at times, but only when a stronger and more impressive sensation, the all-controlling stimulus of brutal rage, has lulled to sleep both instinct and caution.

It seems but a short step from the gaudy-colored fly to the less pretentious one that imitates nature, but as we progress it will be noted that the unexpected has developed a much wider range of vision than our first supposition led us to anticipate. The gaudy lure certainly possesses a similitude, its nearest approach being shape (shape here applies to my method of tying the colored fly as in Fig. No. 3), and its greatest divergence being in its color, wing, and body formation. The broad line of de-

marcation, however, is inherent in the fact that the one makes its appeal by the excitation of extreme irritability, the other adapts itself to the predatory instinct acting in harmony with appetite.

It is indisputable that the trout feeds largely on the Ephemeridæ, and it is also of extreme importance to bear in mind that his sense in selection is dainty in the extreme, rejecting all varieties of flies upon the water except the particular one which is the object of his pursuit. It is an argument in favor of the natural imitation theory. It remains then for the scientific angler to present a correct imitation of whatever insect at the time may please the varying fancy of the fish, with an almost certain assurance of success with this process, provided that he does not destroy the perfect illusion by imparting improper movement in a bungling cast. The fish is looking for a definite object, to the exclusion of all others, as intent upon it as if we were searching for a ring, in which case our eyes respond only to objects of either circular or bright appearance.

To endeavor to attract a trout engaged in the pursuit of a definite object with an imitation which may be termed freakish would



Natural May-fly.



Fig. 9.

Soft Rubber-bodied Fish-scale Fly.



Fig. 10.

Down-wing Fish-scale Fly.



The Professor.



Yellow Sally.

excite his suspicion: he is open to a single impression, viz., the image of the fly upon which he is feeding. Perhaps, however, when the fish are satiated and are enjoying the repose it is so difficult to interrupt, some success may be obtained by an endeavor to awaken their dormant energies, by highly colored flies and other heretical lures, appealing certainly not to their predatory instinct, but to their vindictive qualities.

Long and patiently was a research carried on for a material to imitate the transparent gauzy membrane nature so lavishly bestows on the different winged insects, and by the "irony of fate," so to speak, the fish has at last furnished it. Mr. Francis Francis, in describing a dressing of the "Jenny Spinner," writes as follows: "The wings—ah! those wings! What shall we do to imitate their clear, delicate, watery transparency?" The best material I know for this purpose is the living membrane of the inside of the scale of the comparatively insignificant carp and the mighty tarpon. Fig. 4 represents the carp scale, the point A the line around which the knife is drawn for its detachment. Fig. 5 shows method of cutting the wing, and Fig. 6 usual shape of scale membrane wing.

I think, without doubt, that the quantity of the catch depends much on the divergence, more or less, from the sys-

tem of fishing I here advocate, i. e., imitation of the natural insect on which the fish are feeding. Some of these elegant and artistic imitations are here given.

Fig. 7. Gut-bodied scale wing fly as tied by Mr. Harrington Keene.

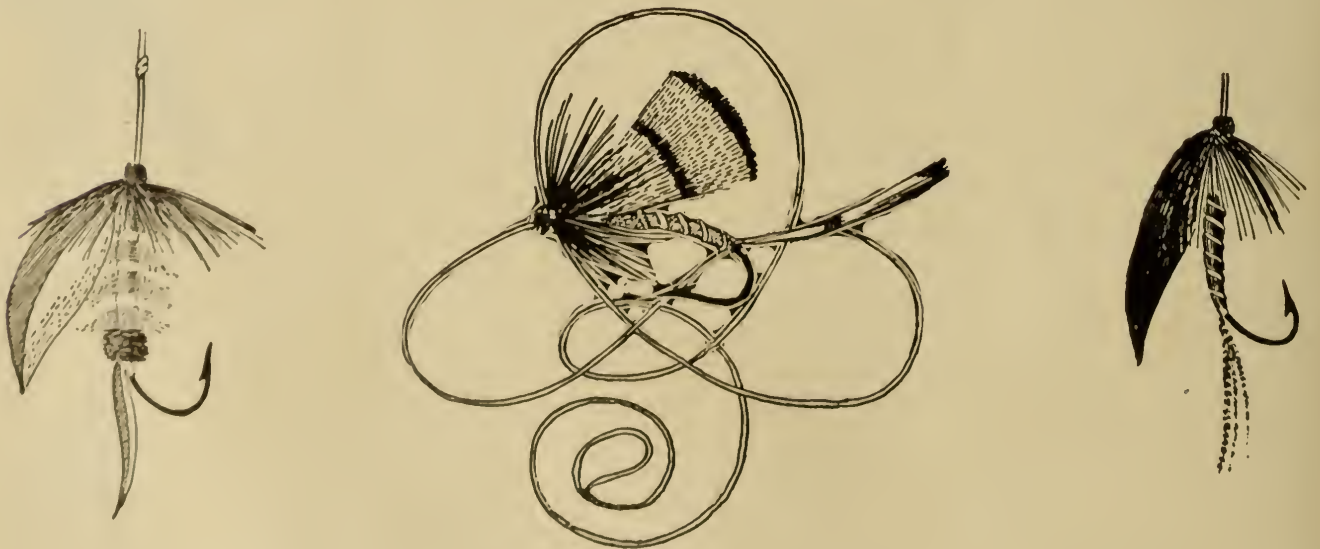
Fig. 8. Dressing of fish-scale fly on eyed hook, center of gravity below the wings, Mr. H. G. McClelland.

Fig. 9. Soft rubber-bodied fish-scale fly, by me.

Fig. 10. Down-wing fish-scale fly.

I have endeavored (without being too practical) in a few words to present my views as to the method of fishing to meet the evolution in trout lures. It would be with little regret could I chronicle the decadence of the nondescript fly. It is the great barrier to the association of fly-dressing with scientific research. Its elevation can be certainly accomplished by the study of the varied forms of insect life, to which pursuit may be added the additional charm of studying nature.

He who in angling feels no other delight than the desire to kill, pursues it with the instincts of his savage progenitor. But he who remembers that what constitutes his pleasure necessarily inflicts pain and death upon these humbler forms of life, content with a modest creel as the evidence of his skill, views it with the eyes which, the world over, mark the true sportsman and the gentleman angler.





HIS FIRST RACE

By Arthur Ruhl.

THE Freshman was a boy who could have done some things very excellently, if he had not been too bashful to do his best. In crises he was likely to come out strong, but that was because he forgot himself. He had lots of sand and seriousness and endurance as long as he worked down in the crowd; then when he found himself on top, with people staring at him and expecting things, he got frightened and ran away. One who is chosen, however, to run a half-mile on his college track-team, cannot run away. He has no eight or eleven other men to help him, or shield him. He must start from the tape, and, on his own legs, and with none but his own strength of will, force himself over that tape two minutes later, as a winner, or else run himself into a faint. This last merely shows that he has the right spirit.

Now, the Freshman had a perfectly healthy body and very prettily shaped muscles, but joined to these a set of nerves that hung like hair-triggers. Because of this, he felt and was hurt by many things which had no reason to hurt him, and never touched other people. Because of this, the week which had passed since he had read in the 'varsity daily his name among the entries had been a nightmare, in which all the outside world seemed leagued in a plot to disgrace him. Because of this, every time the cheers or the starter's shrill whistle came to him where he lay wrapped in sweater and blankets on the floor of the locker-room, or he saw the runners drag themselves in from the last race to fall on the floor in a heap, or caught the warm, rank smell of liniment and witch-hazel which weighted the air

of the room, he cringed and pressed his hot sweaty hands between his knees.

The Freshman stepped out on the track as a nervous horse steps on a shaky bridge. The white figures of the others in his event, the half-mile, were already there, slowly trotting for a few rods down the track, careful, business-like, and self-possessed, as though they really believed it did some good. With long, springy, limbering strides, the Freshman followed. He held his eyes away from the great wall of crowded "bleachers," as you would keep your eyes fixed upward when climbing a precipice. The big, moving, many-colored mass said nothing, but it had a silent stare, the sum of hundreds of watching eyes, which was awful. After a dozen steps he turned and walked slowly back. Even that had made his breath come quicker, and he tried to calculate how far could he get before his wind would give out, and the pitiful hollow feeling would overcome him. He fancied he might get as far as the first quarter.

In front of him the line of crimson tape was drawn across the black cinders. He drew near it with a shivery feeling. He was not a coward. But there was something so new and untried and relentless in it all. There was no luck, no escape. In two minutes he must cross it, either ahead, or with only enough strength left to faint gracefully. The great crowd, a blank of black with splashes here and there of white and blue and pink, stared down gayly and whispered all over, like great trees rustling in the breeze. It was fun for the crowd, sitting in its summer clothes in comfortable seats; it used to be fun for

another crowd, to sit beneath the silken awnings and turn down its thumbs to the gladiators below. Getting used to all this strain, and learning how to run one's self to a standstill, is what wins races. Many grow to like it. The Freshman, however, was running his first race, and he looked at the crowd and the crimson tape as you might at the glittering surgical instruments and the rows of eager-faced medical students in attendance to see your leg cut off.

The eight figures stood waiting. A clerk-like young man, with book and pencil, examined the number on each man's back.

"All right," said he, stepping aside. Then a sharp-eyed fellow stepped forward with a little nickel-plated pistol in his hand.

"Ready, in your places," he said, sternly.

The Freshman had the outside. He felt a dim gladness. Not so much would be expected of him. Next him was a blue jersey, and so on alternately. The crimson veteran was next to the inside.

"On your marks," commanded the sharp-eyed man. Each runner glanced at the toe of his shoe to see that it touched the tape.

"Ready!"—"Set!" Two of the blue jerseys crouched to the ground with arms stiffened straight and thumb and finger just touching the tape. The Freshman leaned forward and squeezed his sweaty fingers tighter. His mouth was like cotton. He listened for the shot behind him, as though the pistol were loaded and pointed at his back. Unconsciously he leaned farther and farther forward. There was a quick wobble in his legs, and he sprawled over the line.

"Come, come, come!" drawled the starter. "This is no fifty-yard dash." And he lowered his pistol. The Freshman stepped back, much confused.

"Now! On your marks!"

Again there was crouching and leaning and stiffening and straining of muscles.

"Re-eady!"—"Get set!" There was a tense, tearing instant; then a short, foolish little click. Someone said something between his teeth. The Freshman had sprawled across the line again. The crimson veteran straightened up and slowly turned his head. He looked much bored. The starter sighed distressedly. He turned a chamber in the revolver.

"All right! Now—on your marks!" "Ready!" "Set!" The starter glanced sharply along the rigid line. Then his arm went up above his head. There was a snappy report, a quick scattering of cinders, a leaping of muscles into life, and the Freshman felt himself falling through bottomless depths of air. When he came to himself he was a dozen yards down the track, fiercely elbowing for the place next the pole. The first furious moment of pushing and cutting across in front and cutting in behind was over, and, like different sized stones rolling down a steep incline, the runners had shaken themselves into place. It suddenly occurred to the Freshman that the thing which had hung over his mind like a heavy paining cloud had burst.

He could not have told why he was trying so madly to pass the object at his side, and thus was wasting the strength that should have been saved for his legs. He had no idea of the pace they kept, nor how long he could stand it. The blue jersey merely moved faster, and blind instinct urged him ahead. Then he remembered that the blue jersey, being on the inside, was running the shorter distance, and that there was a whole half mile ahead of them. There are ten chances to one that he would have forgotten this. The Freshman dropped in behind, and hooked his glance to the number on the other's back.

As they passed the first turn, he saw the veteran sweeping grandly into the first straightaway, as one sees the locomotive from a car window when the train rounds a curve. To that steadily advancing figure of white, its legs rising and falling with the regularity of pistons, he felt a sort of invisible attraction, as though it drew the others after it. Between the leader and himself were figures, but he did not know how many, or that a blue jersey was second, a crimson hand third, then two blue jerseys, and sixth himself. He realized only the inexorable fact that he was in something which could not stop. He fixed his eye on the big black number in front of him, as in the midst of a herd of stampeded cattle you would fix your eye on the animal in front. He felt entirely on the defensive. The spirit of a race never occurred to him. The runners, the audience, were all

combined to pull him through an ordeal which they hoped he could not endure.

As his mind accustomed itself to the steady, relentless stride, stride, stride, and he began to feel his toes touch the ground and hear the breath rush in and out of his nose, he felt a new difficulty. It grew big and important in his mind. The pace was too fast.

There is a certain speed which no man can keep up for half a mile. It troubled him that the others did not see that they were going at such a pace. It seemed foolish and unfair, and he felt like stopping to expostulate. Sometimes, while you stand beside a locomotive, the safety-valve bursts into its fiendishly thunderous rattle. You put your hands to your ears, but it does not stop. You feel like asking it to "Wait a moment till I am ready." The Freshman felt in just that mood, as, with the same sort of irritating effect, the outrageous pace dragged him on.

Thud, thud, thud, went the feet in front and behind him. He was now just entering the straightaway opposite the grand-stands. He observed that he was keeping stride with the one in front of him. He knew that old runners sometimes weary out novices, by thus making them run an unnatural stride. It worried him, but he could not seem to change. His eyes still clung to the number. He studied it nervously. It was 83. Each roughness in the printing, the spots of dust, the threads of the cloth, he examined intently. It occurred to him that it could be easily made into an 88. At the time, this seemed a deduction of importance.

The thudding crunch of the spikes into the track and the rain of the cinders against his bare legs, which he now began to notice, told him how fast they swept along. Now and then a lump hit his face, and one, swifter than the rest, struck into his eye. It scratched painfully, and he saw the black 83 with but one eye. They were directly across from the stands now, and as they filed rhythmically by there were pleased little "Ohs" which he could not hear. Nor did he notice, except in a confused way, the shouts from the half-dressed figures who, leaning from the balcony and upper windows of the field-house, as the group passed, yelled, "Good work! Hang on!" and "Keep it up! You're all *right!*"

A white flat stone slipped past beside his feet, and he knew that the 220 mark was passed, and the race was just quarter done. It would take three times the strength he already had used to finish. Just as the dread impossibility of it all sank on his mind, the blue jersey behind pushed himself forward. As the Freshman saw him, out of the side of his eye, he instinctively quickened his own stride. Then he discovered that his legs, which he had forgotten, lifted very heavily, and his breath came hissing between his teeth. This meant that he was getting tired. At the same moment the black 83 began to move steadily away. What was happening was this: they were just entering the straightaway that led past the stands, and everyone was trying to appear well in front of the crowd. As the Freshman saw the number slip from him, saw the wall of spectators looming up ahead, and thought that there was still more than half the distance to run, a cold fear fell upon him. He doubted that he could pass the crowd. He squeezed his fists tighter and bit his lips hard. He cast a short, defiant look at the stands, and, lest they see how weak and wobbly he really was, he stepped as straight as though he were running between two barb-wire fences two feet apart.

The rope fence had broken just as the runners had been sent off, and the crowd had pushed out on the track. With cries of "Get back! Get back! Give 'em a show!" the mass opened into a narrow lane, through which the racers tramped single file. With the same ceaseless crunch, crunch, swish, swish, and breath hissing through teeth, they approached the gauntlet of stares. It seemed to the Freshman that he was in some struggle of dreadful seriousness, and the glimpses of faces and ordinary clothes seemed far away and irrelevant, as might appear the trees and shore to one struggling in the water. As he entered the lane, the stares seemed to reach out for him, to pull him toward them, and then dismiss him with a shove.

As he neared the upper end he could see the timers leaning out over the edge of the track, watch in hand. A voice said "fifty-seven" as he passed, and he knew that he had done the first quarter-mile in three seconds less than a minute. In all his quarter-mile trials he had never done better. There was still

another quarter to go. The thought of the thing seemed monstrous in its rashness. He almost smiled grimly at the irony of it. At that moment, just as they passed the timers, the blue jersey ahead of him sprang away, apparently as fresh as at the start.

That is what always happens. When the distance is half covered, and the race is merely from one mark to the same mark again, a sort of devil-may-care courage seizes the racers. It is in the little sprint that follows that the half-mile may be won. The novice is likely to be deceived by this sudden freshness. He does not know that his rival is really as weak and hollow as he himself. The Freshman felt his last ounce of strength leave him. It was only a desperate stubbornness that made him squeeze his fists and go through the motions of spurting. At the moment he remembered having once read, "When you pass the quarter mark you should begin to pick up those ahead of you—if there still remain any." Again he almost smiled at the irony of it all. Faster came the chuck, chuck of spiked feet. They were past the crowd, and rounding the upper turn. More desperate were the Freshman's struggles to increase his pace; and, finally, just as they turned into the long side, he felt the prick of cinders against his bare legs. All his strength of will he centered on the black 83 in front. It seemed to move forward with the steady relentlessness of the rear platform of a railway car which one is trying to catch. They were now in the middle of the long straightaway that led past the field house. His breath seemed only to touch the top of his lungs before an irresistible pull snatched it back. His legs were growing wooden. He felt that he could last but a moment longer.

At that instant something took his gaze away from the 83. Just to the right of the blue jersey and slowly falling back toward them, was the crimson-banded runner who had held third place. His stride had so lost its regularity that he had swerved toward the center of the track. His arms, which had moved stiff and steadily at his sides, were doubled up as a child runs, with fists churning in front of his face. His head and upper body pumped, as though he were pushing himself along. The Freshman was amazed. That one of those others

should thus show signs of weakness, while he himself kept his feet, seemed incongruous. Then the exhausted runner wobbled; once his foot struck out sideways, and he was thrown out of his stride. At that moment number 83 passed by. Close upon him, mystified but dogged, the Freshman found himself slowly but steadily slipping past the beaten racer. As he did so, the face of things changed. As they say of ships, he had "found himself." When he snapped his eyes back to the 83, he felt a new look in them. Before, it had been that of the stubborn terror of a child; there was now a suggestion of the eyes of a fox-terrier who stands before a rat-hole with tail bobbing nervously and legs trembling with excitement.

It was a big thing which the Freshman had learned in the last second, but it did not make new legs, or lungs full of air. They were just passing the three-eighths mark, and he must finish as he was. The same relentless chuck—swish—chuck—swish—beat upon the cinders. The Freshman's legs seemed to have lost all feeling and to rise and fall mechanically, like wooden sticks. Suddenly one of them slipped, just as when some one hits you unexpectedly behind the knee. This meant that he was falling out of his stride, and it frightened him. The breath fell so shallowly into his lungs that he seemed to be seizing it in bites. Once he discovered a fist in front of his face, and he knew then that he, too, was "pumping." Things were getting wavy and hazy before his eyes. He was learning the meaning of the phrase, "running yourself out." It means run till you are ready to drop, then shut your eyes, squeeze your fists, and *sprint*! It is about as easy as holding your breath as long as you can, then diving under water.

The Freshman did not realize, in the excitement of it all, that he was unconsciously increasing his speed at every step. But he saw the 83 come nearer—slowly, maddeningly slow—but steadily nearer. As each dead leg heaved forward, and the breath slipped from the grasp of his teeth, he approached inch by inch until he could have touched it with his hand. Then a rash courage came upon him. His eyes left the 83; he swerved quickly to the right, his left arm grazed the other's right, and he was past.

They were entering the stretch. Striding ahead, with first place easily his, was the veteran. The second blue jersey was not more than a rod ahead. The Freshman fastened his eyes upon the advancing back, and, foot by foot, came up to it, as you would pull yourself, hand-over-hand, up a rope. He shut his eyes for an instant, and again swerved to the right. Then he heard something from the waiting stands down the track. For several seconds there had been confused cheering, but he had not understood it. This was something he had never heard before. It was his own name shouted out by the black waving mass that stretched all along the straightaway to the tape. All in a flash it came to him that the great crowd, instead of being a cruel, silent, staring enemy, was with him. And the track, instead of being a sort of operating table, was a place on which to race, and sometimes win. And the other runners, the spectators, every detail of it all, were only parts of a big game which, after all, ought to be fun.

Fifty yards away in front he could see, stretched breast-high across the track, the narrow line of crimson tape. With the shouts at his side sounding gloriously in his ears, he took his eyes from his rival, and held them to that narrow streak of red. In his mind he took in the number of strides and the strength it would take to reach it, just as you understand a whole sentence of print at a glance. He felt that he could do it, though it had come to be amazingly hard. For the track had taken on an odd habit of rolling, rather like the deck of a ship; once it came up to meet

him so that his foot struck before he meant it to. From the finish mark he could hear the trainers sternly calling, "Keep your feet! Keep—your—feet!"

Then at last he saw the back in front of him waver a bit in its course, and the arms and upper body begin to pump. At the same instant the great black mass along the lines seemed to grow taller. The Freshman fixed his eyes again on the wavering number, and again drew himself nearer and nearer. He was almost neck-and-neck now—just a shade behind, then a shadow ahead. The two struggling figures seemed inevitably to run together. The track behaved strangely, and the Freshman could not keep clear of the man at his side. The tape was not more than ten feet away, when their elbows hit hard against each other. For a moment the Freshman thought he was falling; then, half running, half diving, he lunged toward the tape—and fell on the other side.

Scrambling to his feet, with arms and neck hanging very limp and breath coming very quick, he looked round him in a dazed way, as though he wondered what had happened. Then, because his knees suddenly felt very queer and weak, he started slowly to sit down, when many arms grabbed him and he felt himself raised. There was pushing and noise and much dust. As for our Freshman, he blinked down from somebody's shoulder in pleased embarrassment upon the crowd, and then, because he had done a big thing and felt very empty and weak and queer, he let his head droop and beneath his half-closed eyes grinned inside at the crimson "H" upon his breast.





IN WOODLAND BYWAYS

By Lynn Tew Sprague.

"Now is the high-tide of the year."—LOWELL.

I HAD heard the rain pattering on the canvas of my tent during the night, but assuredly the sun never shone brighter than when I threw back the flap and looked out across the fields. A morning in early June and the earth fresh and jocund from its perfumed bath.

On all sides my feathered neighbors were piping their matins. The wren that nested in a hole in the old chestnut tree which shaded my canvas house, was singing as if its little throat would split—a high soprano soloist who for accompaniment had the subdued, tinkling gurgle of the bobolink's honeyed call—and every now and then a meadow-lark breaking in like some particularly sweet strain of the first violins.

Did one ever have more delightful neighbors?

My speckled little friend kept taunting me with the loss of glorious moments and I was soon afield. Buttercups nodded to me as I walked. Star-grass and bluets were drinking the morning

dew, daisies were opening their yellow eyes, and under the fence rails I caught sight of the gleaming, wondrous color of dandelions.

Overhead the sky was of that deep and tender blue which northern skies so seldom wear, and away to the south hung a great white continent of cloud with edges of burnished gold, and the brook that crossed the field and made for the wood sang its merriest, happiest strain.

I paused a moment to listen to the chorus of songs, the sparrow's, the lark's, and bobolink's, and then took the path by the brook into the woods. The blossoms were almost gone from the dogwood-tree, but the forget-me-nots were tangled masses on the margin of the



stream, and graceful, tall, feminine stalks of blue flag clustered at the edge of the thicket.

My path wound under green arcades, where soft, woodsy perfumes filled my nostrils, and I had taken scarcely a dozen steps before a bit of gleaming red shot past me and set my heart a-singing. It looked against the thick foliage like a dancing flame, but I knew it for the most showy—to some the most beautiful—of our summer resident birds, the scarlet tanager. He perched himself high in a tall beech, and was no sooner settled than he fell to singing.

There is a peculiar forest flavor about the tanager's song. It is cheery and rhythmical, and though not quite so loud, not quite so cordial and familiar as the robin's, it is like it, save for its subdued, sylvan, almost at times elfish, quality. In spite of his brilliant coloring, the scarlet tanager is more often heard than seen. Though he nests in low trees, he nearly always sings high among the leaves, screened by foliage.

I was still looking at the tanager and listening to his blithe madrigal, when very near to me there rang out of the bushes the "wee-che-che-chur-chee-chur," of the blue-winged warbler. Turning I saw this handsome bird hanging head downward on a small oak not ten feet from me. Never before had I been in such close proximity to a live songster of this species, and I watched him with interested curiosity as he crept around the bole of the tree in search of food. How bright the yellow that dyed the top of his head; how beautiful the steel blue on wings and tail!

We have as migrants, or summer visitors, in the Chautauqua hills, that part of New York State of which I write, no less than sixteen or eighteen species of the warbler family, but none of them is more interesting than the blue-winged warbler. The yellow warbler, the oven bird, the redstart, and that handsome bird, the hooded warbler, are probably our most common varieties of this large and brightly colored family.

Our common yellow bird is an exception to the rest of the family in that he is not shy, and does not live in the dense woods. Suddenly, with a leisurely cry that sounded like "swee-swee," my specimen flew away, and when I looked for my tanager I found he, too, had gone.

I strolled leisurely on, watching the

minnows in the brook, listening to bird-calls, and the ceaseless, drowsy murmuring of the little stream. Now and again there came to me from a far-away verdurous spot the delicious song of a wood-thrush.

Every few steps I bent over some delicate sylvan blossom—the pretty bunch berry, a belated star flower, a bunch of odorous white violets. The blackberry bushes had showered the ground with white petals, but here and there a wild rosebush, in full flower, showed its old-fashioned, modest beauty to make me dream of shy colonial maidens. Just on the edge of a wide patch of forget-me-nots I found a cluster of those most beautiful flowers of a beautiful family—the showy lady-slipper. It was a rare find, so scarce is this lovely flower with us. I had not the heart to pluck the great, white, pink-striped blossoms from their gracile stems, but stooped to inhale their rare perfume.

A little farther on I passed under an arbor of wild grape vine, and as I stood to breathe its dainty aroma, a golden-winged warbler perched just above me and lazily drawled its "zee-zee-zee-zee" in the most perfunctory manner.

Why is it that so many who love the woods, their green winding walks, their vitalizing perfumes, their cool shadows and witching half lights, know so little about the joyous life within them? Birds may easily be heard, and it is not half so difficult to see them as is commonly supposed, if one will but take pains to that end.

Do not stride through the woodland byways as you walk the crowded streets. It needs only that you should compose yourself in some unfrequented nook to find a tonic for your soul.

At a bend in the stream where the water tumbled and sang with mellow fervor, I sat down to rest and dream. Suddenly I became aware of a wood-thrush singing not far away. Another answered nearer, and soon the divine chorus came from all sides. What words are there with which to speak of the matchless song. No human voice, no instrument that human skill has devised, can give that almost holy quality of tone. Yet there be many that grow enraptured with the pianoforte, who will walk the woods and not even pause to listen to the celestial hymns. Thoreau loved

the wood-thrush's song, and Audubon wrote of it more enthusiastically than of any other bird music.

Swiftly and melodiously as the waters in the brook the moments ran by, and now a veery, now a thrasher was heard; and the music of brook and birds, and the verdurous clouds above and around me, set my fancy leaping back into the poetry of immemorial ages.

Out in the fields I knew the sun had been pouring down, and larks and bobolinks were silent in the grass. But here were cool, refreshing odors and soft music, and emerald tapestries, and rugs of many hues, decked with flowers that make the garish pigments of artists cheap indeed.

The shadows lengthened rapidly as I walked back to my holiday home through the perfumed air of the forest. Bits of broken sunshine lay across my path under the green arcades, and where the winding way left the sweet peace of the woods to enter fields shimmering in the slanting light, stood two huge and venerable oaks like patriarchs guarding their flocks.

The birds were tuning to a fuller chorus the vespers of the declining day, and wondrous vistas down the circling aisles unfolded as I walked. Such high green arches as those above me, I reflected, had inspired man to erect the solemn Gothic cathedrals. But no ceremonies under human roofs could have in them more that is uplifting and helpful than such a walk as mine in the unfrequented wood on a day in June.

Into the fields I came at last, happy and very hungry. The bobolinks were now on wing again; the meadow-larks were sweetly fluting to the setting sun; and I heard my bonny brown little neighbor piping his dainty sweet evening song in the old chestnut that spread above both him and me like a benediction.



J. Oliver Nugent.

THE WHY AND WHEREFORE OF GOLF RULES.

Charles B. Macdonald,

Member of the U. S. G. A. Rules Committee.

IN America every person is comparatively a beginner at golf. For a beginner to comprehensively and intelligently understand and apply the rules of golf he should acquire some knowledge of the history of the game from which the rules have evolved.

A golfer born and bred in St. Andrews, Scotland, intuitively absorbs the spirit and traditions of the game, though he may know really little about the letter of the law. Custom made the law, and so St. Andrews has ever been a law unto itself in golf. When the myriad of golf clubs sprang up throughout the world, with every variety of golf course, some laid out in the Garden of the Gods in Colorado, others on the torrid lands about Aden, in Arabia, by the rocks, rills, ravines, and woods of Ardsley-on-the-Hudson, or in the cotton fields amidst the piny woods of Georgia, with their clay and sand putting greens, the custom at St. Andrews did not satisfy, nor could it meet the emergencies arising from the new conditions.

The original rules were drafted to apply to golf courses laid out on links, and later to apply to lands where it was reasonable to suppose it was possible to lay out a first-class golf-course. It was left to green committees to content themselves by making local rules to govern the exigencies of unusual courses. Nevertheless, the pressure eventually became so great by the mass of golfers that the premier club, the Royal and Ancient Golf Club of St. Andrews, consented to a revision of the rules, appointing from its own members a committee known as the Rules of Golf Committee, to revise the rules, and to stand in future as the final court in all matters concerning the rules, their interpretation and their application.

As a matter of fact, this committee has scarcely made any changes in the actual play of the game; they have simply altered the wording of the old rules, and tried to arrange and state simply the many unwritten laws, that is, customs

which have obtained in playing the game on the ancient links of Scotland.

The particular phases of the history of golf which should be thoroughly understood by anyone trying to master the rules, are the character of the ground, or links, golf was anciently played over, and an understanding of the early codes. Knowledge on these two points will materially assist one in imbibing the true spirit of the game in conjunction with the letter of the law.

Turning to the old Scottish dictionaries, we learn from Jamieson's Scottish Dictionary (Edinburgh, 1803) that links were originally the windings of a river. The word also meant the rich ground lying among the windings of a river. Later it also meant the sandy flat ground on the seashore covered with bent-grass, furze, etc. It was on such ground the ancient game was first played, so far as history harks back, that is, on links at the mouths of the Eden, the Tay, and the Forth.

Jamieson says: "In time the name was transferred, but improperly, to ground not contiguous to the sea." "The most probable reason of the designation is, that it having been customary to play golf on the links of Leith, when the ground in the vicinity of Bruntsfield came to be used in the same way, it was in like manner called links."

The student will at once realize that the original rules of golf were made to apply to links proper: low and slightly undulating sandy soil, well covered with whins, bent-grass, etc.

Where there was no turf the wind blew the sand so as to make hollows or bunkers. The old dialect dictionaries give the definition of a bunker as "A small sand-pit," or "A sandy hollow formed by the wearing away of the turf on the links."

The two original fundamental laws of golf embodying the true underlying principle and spirit of the game are:

The ball must be played from wherever it lies.

Nothing shall be done to improve the lie of the ball.

Given links and these two rules, surely the spirit of the game will be better understood by every sportsman.

The revised rules as they stand to-day have been evolved from the above conditions; and the extension of the code has been sanctioned gradually by the Royal and Ancient Golf Club of St. Andrews, a ruling body which has ever been in touch with the ancient traditions and customs of the game, handed down as they have been from generation to generation, from century to century. That is why the club is recognized as the ruling golfing body.

In reviewing the revised rules I shall endeavor to show wherein the alterations affect the game as it has been customary to play it in America, and to draw attention to some points that will probably cause discussion. The definitions are now grouped under rule 1 instead of being embodied in the different rules. I will touch only upon the principal changes or alterations.

The putting green now comprises the green beyond a hazard, if within twenty yards of the hole; formerly it did not.

What a hazard is, is now definitely stated. The phrase in the old rule "anything which is not the ordinary green of the course" is omitted. Golf clubs having quarries, ash, stone, or rubbish heaps, pigeon traps, woods, gopher holes, wood-piles, and other obstructions in their links must legislate for them if they desire them to be treated as hazards.

Bunker and hazard are not synonymous terms. On many courses in this country the writer is aware the term bunker is indiscriminately applied to all kinds of hazards, doubtless growing out of the loosely worded old hazard rule 15. A bunker is a distinct kind of hazard, viz.: A sandy hollow, whether natural or artificial.

The dictum that "Permanent grass within a hazard shall not be considered part of the hazard," has already caused an interpretation to be asked for. The ruling of the U. S. G. A. by the old rule 14, "That turf in a hazard or surrounded by a hazard shall be considered part of the fair green," the writer thinks was much clearer than the new law.

Straggling or scattered grass is not

permanent grass, though it possibly might be considered permanent where the green committee has neglected the upkeep of the green. The spirit of the game would dictate to a player that the club should not be soled if it was possible to make an impression on the soil where there was any question as to the grass coming under the rule.

Further referring to this definition the writer notes his confrère, Mr. Laurence Curtis, in his article in *New York Golf* for April, asks the following question:

"Does this mean when the ball lies on such permanent grass that then loose impediments lying within a club-length of it in the hazard may be removed, whether they lie on or beside permanent grass?"

Mr. Curtis thinks the grounding of the club *only* should be allowed, and that loose impediments must not be removed on the permanent grass. A ball in play must be in one of three places: in or touching a hazard (e), through the green (f), or on the putting green which is being played to. (Def. d and f.)

Permanent grass not being a hazard it evidently then must be a part of "through the green" or the putting green being played to (which is not impossible). Consequently rule 10 governs the question, and any loose impediment (not being in or touching a hazard) which is within a club-length of the ball, may be removed.

Definitions (f) (g) and (h) are all new. That of "through the green" (f) is excellent and simplifies the interpretation of the rules. It has been customary to consider "out of bounds" (g) and "casual water" (h) as the committee has defined them.

In definition (i) [A ball shall be "in play" as soon as the player has made a stroke at the teeing-ground in each hole, and shall remain in play until hand out, except when lifted in accordance with the rules.] it is the opinion of the writer that the committee makes its only serious blunder. It undoubtedly was an oversight, when it added to the definition of a ball "in play," "except when lifted in accordance with the rules." This technically would practically permit a player to do what he pleased when his ball was lifted and in hand; clean the mud off, break or bend anything fixed, and take other liberties contrary to the spirit of the game.

Rules 9, 12, and 14 apply to a ball "in play." Rule 9, [. A ball in play

shall not be moved nor touched before the hole is played out, under penalty of one stroke. . . .]

Rule 12, [Before striking at a ball in play the player shall not move, bend nor break anything fixed or growing near the ball. . . .]

Rule 14, [A player or caddie shall not press down nor move away any irregularities of surface near a ball in play, etc. . . .]

Rule 20 applies to a ball on the putting green. Rule 20, [When a ball is on the putting

green, no mark shall be placed nor line drawn as a guide . . . etc.] According to the defini-

tion as it now reads, if the ball is lifted and in hand it clearly is not "in play" nor "on the putting green," consequently these rules technically are ineffective until the ball is replaced.

London *Golf Illustrated*, March 30th, says: "Mr. Curtis' proposed ruling was, 'A ball when lifted is not in play, and may be cleaned or another ball substituted for it.'" *Golf* commends the committee as acting wisely in rejecting this rule, adding "it would never do to allow a muddy ball lifted on the putting green—to be cleaned."

The writer was uncompromisingly opposed to Mr. Curtis' ruling as being in violation of the spirit of the game as expressed by the two original laws above given. Assume two competitors, each having an almost unplayable ball owing to adhering mud lying on the putting green, one ball stymies the other within six inches; the nearer competitor lifts and cleans his ball, while the other must play penalized by his muddy ball. Any golfer must see this would be unfair to the field as well as to the player's fellow-competitor. The letter of the law as it reads now might justify the player, but the spirit of the game—never. Many such instances might be cited.

Old rule 13, "A ball stuck fast in wet ground or sand may be taken out and replaced loosely in the hole which it has made," has been omitted, undoubtedly because it is against the true principle of the game to change, touch, or move a ball once driven from the tee if it possibly can be avoided. On first-class links it can be avoided, and why legislate for second or third rate courses? Local rules can cover their deficiencies without burdening the whole world of golf.

Regarding rule 33 [A player shall not ask for advice from anyone except his own caddie, his partner, or his partner's caddie, nor shall he willingly be otherwise advised in any way whatever, under penalty of the loss of the hole.], the question has arisen, Can an outsider looking and finding a lost ball be considered as giving advice in violation of the

rule? Technically, it is an open question, but the spirit of the game has made it not customary to so consider it.

Another question sometimes asked is, At what time are competitors to assume new holes have been made under U. S. G. A. interpretation of special rule 3? It has been ruled that the Green Committee should decide this when giving notice of competition; in event of their failing to do so, competitors must assume new holes to have been made the morning of competition.

There will always be ingenious minds who will be forever proposing problematical questions as to the application of the rules of golf. Most of these persons are entirely ignorant of the fact that golf legislators have always recognized there are many questions that can be decided only by equity. Note old rule 40, or new rule 35: "If the point in dispute be not covered by the Rules of Golf, the arbiters must decide it by equity."

Only the other day an official of the U. S. G. A. read the writer the following query: What is the penalty when a player's opponent steps in the line of his (the player's) putt and increases the difficulty of the putt? The reply was, The rules provide no penalty, and the dispute not being covered by any of the Rules of Golf, arbiters must decide by equity.

This reminds one of the following story, which is quite apropos, for it shows the spirit versus the letter of the law:

In England, five-and-twenty years ago, during the infancy of lawn tennis, a heated discussion raged among the wise ones as to whether or no a player was justified in letting his racquet go over the net when rokeying. The wording of the rule was ambiguous on the point, and the disputants referred the reading of the rule to a well-known sporting barrister. His answer was: "I don't know any rule at cricket that will prevent the batsman leaving his wicket and hitting the bowler over the head with his bat; *but it isn't usually done.*"

In like manner, in golf a player can step and mar the line of his adversary's putt. A player can also hit his adversary or his caddy intentionally with his ball and claim the hole; *but it isn't usually done.*

ON THE BIG SEA WATER.

By Stewart Edward White.



The Skipper.



The Dog Watch.



The Red Rover.

MOST of the Lake Michigan and Lake Huron yachtsmen either sail majestically up the middle in schooners, or dodge past sand-bars between ugly piers in smaller sloops.

Neither course is pleasant. In the schooner you have a sailing-master, a side-board, and many friends. You hoist flags in a punctilious manner when the crew eats pie, or the skipper takes a drink; you bestow much thought on the advisability of shooting small breech-loading cannon; the failure of one of the A. B.'s to coil a line Flemish causes uneasiness, and the boarding of shore visitors on the captain's side of the yacht is a matter of agonized mortification. This is interesting, just as is the purchase of neckties of approved stripe, or the donning of the proper

shoes with the proper trousers. But it is not cruising.

Nor is the small boat in much better case. Therein you dodge large short seas which break over with considerable weight; you are constantly reefing for black squalls; above all, you are on a continual rack of anxiety as to whether you will miss the shoal or whether you can make the next harbor before dark—usually a sandy little river, lumber-flanked, dirty.

We avoided both horns of the dilemma, and this is how we did it.

Just forty-five miles from the Island of Mackinac you may enter Potaganising Bay. This, in turn, opens into the North Channel. The North Channel contains many islands and a harbor every few miles. It conceals various bass of sporting proclivity, and it leads to the Georgian Bay.

All these waters are deep. The chart of the British Government estimates that the islands which spangle them number "from thirty to one hundred thousand," which is near enough to the truth not to be troublesome. There are very few shoals, and these few are visible in the clear water many miles. Most of the shores can be dived from, or, what is more to the point, can be tied to with a six-foot draught. The scenery is beautiful. The Chippewa and Ottawa inhabitants are interesting. Up the north rivers are a number of Hudson Bay posts, some of which are still trading. There are no summer resorts. You can sail on open water, with more space abeam, forward, and astern than in Long Island Sound, or you can wind in and out of the island channels, just as you happen to please. Sometimes it seems you are in a great lake eight or ten miles across, the shores of which open before you and close silently behind you as you advance. Again, you need a fair wind and a steady eye, as in the forty-foot passage of the Little Detroit. Or still again, you may be out of sight of land entirely. In that country to the west hangs a horizon of smoke, faintly aromatic, pleasing, and to the north a brown horizon of mountains, rock-browed, bold. The afternoon sun

becomes a great red ball, whose track on the waters is of blood, and whose last glance causes the north hills to blush a glowing purple. Above all, it is the northland, and the air is like wine.

Yet, strangely enough, yachtsmen continue to carry out their punctilious etiquette, or to seek their sawmill harbors, while the bays are solitary, save for the Indian fishing boats and the few, the very few, of the elect.

We are of the elect. We claim it with the arrogance of bigotry, if you will, but we claim it emphatically.

The summer of which this narrative speaks we foregathered from several points of the compass. The mate, possessed of a fly-book which he worshiped idolatrously, and a fund of theoretics which everybody else distrusted, arrived on the *Manitou* from Chicago. The dog watch was a lank individual of skillful pencil, small reverence, and ready excuse, summering on the island. The scullion was a fair-skinned, jolly, good-natured young artist from Baltimore. The skipper now speaks.

Our boat was a cutter sloop, twenty-eight by eight, drawing just six feet, and carrying much outside ballast. She was put together for business. Her decks were flush, with the exception of a low deck-house and a small self-bailing cockpit. Her horn was housable. She could be battened down and driven through anything. Her spars were lofty, and her spread of canvas great. She could, moreover, beat under the staysail, which is an unusual and desirable accomplishment.

For six days we ballasted, rove halliards and sheets, slaved in interior depths, and astounded the resorters by



Near Clapperton.

our disreputable appearance. At the end of that time we found our work good. The cutter was stocked and equipped.

The skipper distinguished himself just before the start by getting knocked overboard by the boom. He made desperate efforts to save himself, but disappeared amid frantic cheers from the entire crew, who, along with winds, waves and marine gods, were most liberally "cussed" when he climbed over the rail. The wind was light and dead ahead as we tacked, and after getting along a few miles it died entirely, so the best we could do was to haul aft the main-sheet snugly and slap about. The crew made bets as to whether or not the yacht would beat the dingy going sideways. On examination of our exchequer we found several pennies, one of which the mate threw overboard with the appropriate whistling and scratching of the mast. The gods were at once appeased, and a moment later we heeled over with gunwales awash. The mate turned a pale green. The dog-watch became a dull yellow brown, and lay down.

And now the skipper had his jest.

Directly across the noble reach of Detour Passage (through which each year passes a greater tonnage than through any like waterway in the world), north of Drummond, the waters open out. Near at hand, far away, to the right, to the left, rise hundreds and hundreds of little islands. They are all wooded to the water's edge; they all drop off into deep soundings. Between them are glimpses of distant blue seas and other islands. As the yacht slowly and steadily cut her way forward, more and more of these dots of rock and earth opened up, revealing enchanting possibilities of



At Anchor—Farthest North.

exploration. With a northerly gale abeam we bowled along through the islands only too swiftly. We had reefed away down, stowed the staysail, even dropped the peak, not because she would not carry the canvas, but in order to reduce speed. You see, we had never been there before, and though we had charts no one could tell whether they were reliable.

So we sped along, disputing about islands, keeping a sharp lookout for yellow water, and hoping fervently that Providence had its eye on us. Somebody had heard somebody say that a man he knew had heard that Harbor Island was a good place.

Suddenly in a long island some miles ahead, a bight opened up, under the lee of which we perceived a narrow opening. Through the opening there appeared another bight. The chart fiends agreed that this must be Harbor Island, and that in the narrow opening—about a hundred and fifty feet wide—was much water. We derided, but crept in under the jib, sounding energetically, when on a sudden came a sarcastic voice from the shore: "There is twenty-two feet of water all through there"—and we abstained from further sounding. After a little we rounded a point, the anchor bit, and we drew a long breath and looked around us.

The passage opened into a great lake or bay situated in the very center of the island. The high woods surrounded it on all sides—even the entrance seemed closed by the point of the outer bay—and in one elbow nestled a house, a workshop, and a dock. We had just dodged in from a three-reef gale, yet here the water was hardly ruffled, and we could hear various frogs, tree-toads, and birds assuring each other sleepily that it was almost evening. We stayed days, and even the business man grumbled only softly. Such is Harbor Island.

Now, on Harbor Island there is a king, and his name is Church. He is grizzled and gray. He lives in a house on the knoll. His wife is Ojibway, and his children half-breeds, therefore the Indians do him homage in some sort. King Church knows the language of the native, and can sing therein; he possesses a fund of information concerning Indian customs and manners, which he imparts quaintly between puffs

of his pipe; he has much lore of ancient times, and can tell you of the old raid the peaceful Ottawas (accent the second syllable, if you please) made on the Iroquois, and how even to this day they occasionally get into a panic for fear of retaliation, and flee incontinently to the headwaters of the creeks. And then he will pour out into a tin cup near a half a pint of raw Canadian Club. After this he wipes his mouth on his checkered shirt, and discourses of Epictetus and the pronunciation of *Thule*. The capt'n surprises you somewhat.

We floated gently out of the narrow passage, and, turning sharp to port, cruised down a little channel between Harbor and Maple Islands. Navigation at this point became interesting. The mate sat in the cock-pit with the charts spread out before him, keeping an eye on ranges, and the skipper held the stick. We wound in and out between beautifully wooded islands, over waters so clear that shoals fairly stared at us, and we couldn't have run against them if we had tried. In a little while the islands widened out, and soon after leaving Indian Village astern, we gybed and headed up the more open waters of Potaganissing. Some little time later we rounded Chippewa Point and emerged into the north channel of the Georgian Bay, finally dropping anchor behind the peninsula of Thessalon.

On the east side of the peninsula we discovered a cove, surrounded by huge old Laurentian rocks, rounded by the action of water and cracked in symmetrical parallelograms by the frost. In a hollow between several of these some Indians had pitched their wigwams and built kettle tripods. The rover and dog-watch had been so long deprived of feminine society that they hailed with eager delight the advent of two girls on the beach. With a view to moonlight boating, they became clamorous to borrow the dinghy. *Vetoed*: the skipper and mate wanted to turn in.

Next day we made a direct run across open waters under a southeasterly breeze. The air was cool, the sun warm. All the ship's sewing and patching was done, the rover in especial toiling long and loud over his private wardrobe. The mate kept an eye on the chart, and all took tricks at the helm.

About four bells we dropped anchor in Sitgreave's Bay, a large bight of



The Dog-watch Takes a Bath.



The Rover Mends His Wardrobe.



The Rover Sleeps on Deck.



The Scullion Goes Shopping.

water, hugging a smaller bight under the arm of one of its points. The latter made an ideal harbor, sheltered in every direction. The mate exhumed from his war-bag that precious fly-book and had a try for trout.

The mate was always convincing himself that he had left that confounded fly-book on the beach somewhere. He usually attained that conviction about midnight, at which time he would rout us all out and detail his suspicions.

"Well," said we with forced calmness, "we're anchored. It can't be any farther away by morning."

"Ah, but I could not sleep until I know where it is!"

He would then haul from his war-bag the following articles, which he distributed over us in our bunks: Two undershirts, two pairs drawers, six pairs socks, one pair shoes, a sweater, a flannel shirt, two pairs ducks, a suit of oil-skins, fish-lines, soap, towels, brushes, medicine case, pistol, cartridges, and, last of all, the fly-book. Then putting them all back again, he would sink to sleep like a tired child.

Near the head of a cove we passed through a zone of echoes, remarkable even for this country of many voices. At one place a pistol-shot gave back seven distinct reports. All day long we loafed through the open water, passing successively the False Detour Passage, Cockburn's Island, Mississauga, and the first point of Grand Manitoulin—a huge island, which was to lie to our starboard for many days.

The only breeze we struck next day struck us about breakfast time. It had been perfectly calm, and the skipper was trying to get breakfast. On the oil-stove he had a kettle of "stirabout"; on the alcohol lamp a pot of coffee. The puff in question wandered idly over the hills of Mildrum Bay, sought what it could devour, and leaned against our mainsail to rest. The coffee emptied into the starboard bunk-locker; the stirabout was saved at the last moment. The alcohol distributed itself impartially and began to blaze. At this the skipper seized a coat (the rover's) and entered earnestly into the business of extinguishing small flames. To accomplish it he leaped madly back and forth soliciting assistance. The crew, puzzled and anxious, could not for some time make out the seeming madman. Their

final comprehension arrived about the time the last flame was smothered, and the skipper then had difficulty in averting a deluge of water.

Somebody believed the squall hit pretty hard, but none cared.

One day we beat down Gore Bay, around another point, into a beautiful land-locked harbor. On one side the bluffs rose to a height of over two hundred feet, palisaded like the Hudson. In the curve of the other lay the town, a dusty-streeted little affair, whose establishments were adapted to the needs of farmers.

The dog-watch, the rover, and the skipper climbed the high bluffs, wherefrom they obtained a beautiful view of the bay and the surrounding country. The latter is well cleared into organized farms, in sharp contrast to the trackless wilderness everywhere else in this northland.

Clapperton Island is what the part above water is called. Thereabouts are large rounded boulders, bigger than houses, wherefrom you could slide on a shovel direct into nine fathoms. Near at hand are the Sow and Pigs, brown-skinned, foam-flecked, threatening. Underneath are bold reefs to be dodged by means of puzzling ranges.

We did these things, and, besides, we managed to admire the great ragged hills to northward, the green islands ahead, the queer, straight-up-and-down formation of Clapperton itself. We took a moment to cuss the dog-watch for letting the jib-sheet run at the most critical moment of all, and to wonder frantically about the location of Reynolds' Rock, water a fathom and a half, big sea. That sea was nasty, three-cornered, wet. It slapped us, and twisted us, and yawed us until the helmsman's life was a burden to him because of the great fear of jibing.

However, once that rock was dodged and that point rounded, we found ourselves boiling along down the lee of Clapperton in a flat sea, but with a puffy wind that often buried our dead-eyes. The rover distinguished himself by sitting calmly on the stern in the height of the nervousness sketching the effect of some old lumber schooners against the sky. The wind now swooped over the hemlocks of Clapperton, and fell upon us suddenly. This disgusted the dog-watch, for the sporadic and de-

cided heeling of the craft disturbed his habitual reclining posture.

As we proceeded, we became aware that the objects toward which we were tending, notably a range of perpendicular cliffs and a deep V-shaped bight, were larger than we had at first supposed them to be. The cliffs rose; the bight opened. We consulted the chart. The land proved to be some six hundred feet in height, and the bay eighteen miles deep and five miles broad. Later we learned from the Indians at its foot that we were the first yacht to enter it for twenty years, which goes far to show the unexplored character of these waters. The Indian village just mentioned consisted of perhaps a score of little log-houses scattered over a mile or so of country. They were arranged quite without order. Instead of flanking the road, the road went to them. They seemed to be fairly clean for Indian huts, owing probably to the fact that these were not "backwoods Indians," but enjoyed the advantages of Christianity. These advantages consist mainly of *ex post facto* marriages, a church with a small tin steeple, and the usual brilliant Roman Catholic prints. That is to the external man. But they mean moreover industry, child-like faith, and a blind trust in the priest. The monthly visits of the latter measure time for the villagers.

In the early morning the wind backed to the north. The skipper paid out cable and let go the second anchor. Later a big sea was rolling down that thirty-mile sweep. We tugged and plunged. "Kismet," said we, and hung on. The rain drove down and we had to eat a cold breakfast within the cabin. "Hell!" said we, and curled up variously, trying to read. The mate took bismuth for a weak stomach. The yacht tried to pull her nose under water by the bitts. The wind shrieked in seven keys.

For untold ages thus it endured. Then with many strange oaths the mate and dog-watch donned slickers and departed in the dingy. "We will stretch our legs on the beach, and return anon," said they.

We issued premonitory advice as to returning into cabins with damp clothes.

Two hours later the skipper uncoiled and looked out the hatchway.

The scudswere scurrying by in ragged gray wisps so low down that they swept

the face of the great cliffs opposite. A mist obscured all distant objects. Rain drove in fitful gusts. Great white-crested waves rolled majestically down, lifted the yacht, and finally dashed against the coast with a mighty boom.

The skipper crawled forward. Both anchors held. The yacht rode the great surges easily. He returned to the cabin. The rover and the skipper conversed concerning the mate and the dog-watch. After looking out, the rover gave it as his opinion that both were drowned. The opinion was received with indifference. Both then ate of cold lunch.

Finally, about sunset, those base deserters reappeared, one at a time, wetly and with danger.

They reported much. They had penetrated to the sanctums of sugar-makers, the fashioners of snow-shoes and blanket-weavers and builders of baskets. In one hut the dog-watch had been requested to dance with an Indian maiden of sweet sixteen, but, overcome with sudden and strange timidity, had declined, whereupon the squaws did guy him in strange polysyllables. The mate was hailed as a *Musk-a-wah-wah-ninney*, or doctor, by virtue of his medical studies. The dog-watch agreed to endorse the title, provided the 'accent was placed on the last syllable. Said *Musk-a-wah-wah-ninney* dosed sick Indians with great satisfaction to himself and them.

During the day on which we left this quaint harbor we shifted canvas just eleven times. We had all kinds of weather, from a vicious black squall to a dead calm. We wore everything, from our skin-tight "swimming suits" to full lines of slickers.

But when it was all over, how pleasant it was to slip quietly along under the influence of a soft fair wind that scarcely rippled the water! The bird songs of late afternoon sounded clearly as we glided past an occasional little island or skirted the miniature coast of a larger bit of land. Directly astern the sun was setting in the usual blood-red haze. The water was taking to itself the peculiar deep

amethyst tinge of the northland, the color seeming to belong in the very substance of the liquid rather than to be merely reflected from the surface. The yacht cleaved her way onward without a sound. Point after point opened up silently. The dusk of evening fell, and we did not care, for we knew that in the narrow channel of Little Current were situated lighthouses, well ranged, and that with this fair, sweet wind we could nose our way to a little cove we wot of at the head of Goat Island, where the channel turns, and thence by one more easy stage to Killarney.

We went through Little Current like a shot out of a gun, but without mishap. Below the passage the water opens out into many broad reaches, island-starred. With the exception of the North Passage, which we did not attempt this trip, it is the most beautiful portion of the channel. From one point you could look up an opening, mathematically straight, twelve miles long, and but a quarter of a mile wide, composed of many islands ranged side by side. To the south, on Manitoulin, open bays as deep as that in which we had weathered the norther. And toward the pole-star were great ranges of precipitous mountains.

All day long we made time through the islands under a fresh fair wind. Almost before we knew it we were picking our way among shoals off Killarney.

We rather expected letters at Killarney, so we sought out the post-office. It was located in an Indian woman's kitchen cupboard. She presented us with the assortment, with the request that we return what we could not use. From her grandmother's maiden aunt we ordered moccasins, most excellent heavy-weather foot-wear for gripping on slippery decks. On the docks was much Indian bark and quill work, indicative of tourists. Inquiry disclosed that the Collingwood boats touched here twice a week, and our letters made it necessary for our scribe to return to civilization by their friendly aid.



"There is a King and his Name is Church."

THE WATER WOLF.

MUSCALLONGE IN JUNE.

By C. S. Thompson.

THERE are hidden in our Wisconsin forests a thousand lakes, and one I wot of most, bearing the homely name of Long Lake, is hemmed in by pineries wild and varied. The shores rise with a gentle slope to a more than usual height, and are mantled with conifers of extra grace and symmetry. The crowns of the pines form a canopy, through the feathery arches of which the summer sunbeams glint on the trembling needles, gild the stately columns, and flicker on the fern-covered ground. In every direction stretch leafy tunnels of soft green light, affording an acceptable rest to the eye of the angler weary of the shimmer of the sun-stricken waters. A silvery beck, fresh from forest springs, murmurs a lullaby as it forces its way by moss-grown rocks and over decayed vegetation. Pouring forth in rapid descent it buffets the lake, pushing its waters back for a space, and, merging into the body beautiful, leaves only a few scattered flakes to tell the story.

It is a perfect June day, a day worthy of our poet Lowell's tribute. The perfume from many blossoming trees, vines, and shrubs fills the air. Glossy winter-green, delicate anemones, the blood-root and the orchid, various ericaceous plants, and numberless ferns beckon us to a silent communion with the varied forms of nature. The red-breasted grosbeak, that gaudy denizen of our deepest forests, pours forth his jubilant anthem. The towhee utters its metallic notes. You catch a fleeting glimpse of the winter wren, skipping over the moss-covered ground, and hear the echoing rap of our northern woodpecker searching the deadened limbs of some old forest monarch. Nowhere in this country is the beauty of outdoor life more varied, gorgeous, and restful than among the lakes and forests of Wisconsin.

There are attractions other than those of nature, which exercise a no less potent influence upon the sportsman. Yet the true sportsman combines the love of nature with that of the rod, the gun, and the canoe.

Stepping from the huntsman's lodge,

nestled away snugly amid the aromatic pines, I stood for some moments drinking in the lake's beauty. Hardly a movement disturbed the waters, though, as time slipped by, little arrowy lines of ripples played upon the heretofore smooth surface, and now and then a scarcely audible splash and an ever-widening circle upon the water indicated the near locality of some voracious bass. Even as I stood the quivering arrows increased and approached until the surface became a dancing sea. The branches overhead moved gently. The ripples near the shore and the summer breeze, heralded by gentle murmuring, had arrived, giving promise of a steady wind during the remainder of the day.

My guide's hearty call announces breakfast waiting, and, as he expresses it, it is time to "dig in." No place is this for the epicure: wealth does not procure delicacies in the forest, but everything is well prepared and served in superabundance. What appetites the forest, laden with its fragrant odors, produces, and how you wish, for a time, that all the year could be passed amid such scenes.

We were soon in a canoe, and the paddle in expert hands carried us quickly to the fishing-grounds, where we hoped to conquer that "wolf of the waters," the muscallonge. Thirty-five yards of line, at the end of which revolved the lure, trailed behind, and I watched anxiously the vibrating tip of my short steel rod. No use in expectancy, however, and, as time moves swiftly by, the throb becomes a weariness strangely aggravating in its steady indifference. Thus the morning hours wore away. My guide became impatient; as we passed the place where we were "sure of getting a strike," his endurance gave way, and his energy was devoted to a few very select arraignments of the fish of that locality.

We went on shore to lunch and rest for an hour, and then, with hope renewed, we were off again. Disappointment met us as before. The sun crept slowly westward, and four o'clock found our lure untouched and our skill unchallenged.

Turning my attention from fishing, I watched idly the waves as they rippled against the birch canoe, and followed in his course a lone eagle as he wheeled his flight sunward, skimming smoothly in an apparently ever-narrowing circle, a majestic king of an almost destroyed family.

Far up the lake, in the direction in which we were headed, could be heard the rattling cry of the kingfisher. Upon nearer approach his blue plumage could be plainly seen. There he sat upon a snag, some distance out from the shore, and near the point where a stream adds its waters to the lake. What a nervous fisherman he is, but always alert, his head twisting and turning, watching ever for his unsuspecting prey. While I looked, he rose from the snag, soared upward, hovered for a moment in mid-air above the mouth of the brook; then down came the lone fisherman with arrow-like rapidity, disappearing entirely under the water's surface, instantly reappearing with his prey grasped firmly in his beak. That bird offended my pride. There came an uncontrollable desire to throw my line near the spot of his success. It was not a generous feeling, for I remember once, while fishing near an old mill-dam, having caught a small fish, another fisherman, less lucky than myself, "stole my hole" and triumphantly captured a two-pound beauty. But here was the same feeling prompting me to "steal" the kingfisher's hole.

We presently neared the snag, then slipped quickly by, the canoe almost rubbing against the obstruction. On we moved, and the rod kept up that same tantalizing throb, until there was a sudden strange heaviness in its feel and the tip bent far backward. Giving it a jerk, I called upon my guide to wait a moment, as I feared my line had fouled.

About thirty-five yards back of the canoe something made a swirl upon the water, and a tail of great breadth glistened for a moment. The rod bent and the reel sang a merry song as my muscallonge made his first wild lunge for liberty. Zip, zip, z-z-z-z-z-zr-zr! sang the reel. Down, down he sped with a rapidity that was startling. Suddenly stopping, he sulked for a moment, but a gentle attempt to regain some line stirred him to fight fast and furious. Up he came to shake from his mouth

the detaining hooks, and lurched full length from his element, making the spoon ring as he shook his head in a vain effort to dislodge it. What a sight! and how appreciated by the devotee of the rod, as the tireless fighter rose from the water and dropped back again with a splash, leaving a wide swirl as he once more sought escape from his foe by sounding.

Three times he broke water, but all of no avail. Then he grew sulky and refused to fight, allowing himself to be drawn unresistingly, barring an occasional ominous shake of his head, to within a few feet of the canoe. His brown body could be plainly seen, and, with many contending emotions, hope and fear alternating, I gazed upon his size and beauty, and visions came of my thirty-five-pound scales being inadequate for their duty. Winding in very slowly, ever watchful lest he should elude me, my anxiety and nerve tension almost unnerved me. Surely he is not going to give up thus easily. Most surely not, for he now sees us, and down he goes with the force which strength and fear combined to give him. See-saw, backward and forward, until worn out, the giant comes up exhausted and motionless, and is quickly thrown into the boat by the dextrous movement of my guide. The battle over and the hard-fought victory won, we, as did the noisy feathered fisherman, wend our way down the lake toward the camping-grounds, satisfied and joyful.

Down sinks the sun in a blaze of glory just as we reach the welcome lodge. Stepping upon shore, we stretch our tired bodies. The canoe is drawn out upon the bank, the guide hastens to prepare supper for the hungry, and I? well I just lazily sit by the lake's shore and listen to the evening carol of our feathered friends. In this northern solitude, the twilight is of considerable duration and of exquisite beauty.

Loneliness is dispelled by the guide's summons to supper, and his question, "What did you do with the fish?" Oh, the fish! why I had forgotten all about the "musky," but now the lidless-eyed wolf of the waters, the famous fighter, the rival of the celebrated tarpon, is lifted from the canoe and weighed. Down sinks the telling hand past thirty! —yes, just two past. Thirty-two pounds, and a right noble specimen he was!

THE SINGING GIBBON.

By Arthur Erwin Brown.

WITH the acquisition of the Philippines the United States comes into possession of a portion of the home of perhaps the most remarkable member of one of the tribe of apes, and this no less a one than that which is sometimes called the "singing gibbon." A newborn sense



At His Top Note.

of ownership can hardly fail to add interest to an account of some of the characteristics of this fellow-countryman.

Perhaps he can have no better introduction than a quotation from that father of modern zoölogy, Richard Owen, who says: " * * * the gibbons have the greatest range of notes; they alone of brute mammals may be said to sing. I heard with astonishment the wouwou (*Hylobates agilis*), captive at the Zoölogical Gardens, emit the rising and falling scale of semitones throughout the octave * * *." The present writer may call his own sensations, upon first hearing a similar performance, to witness that the veteran anatomist was moderate in his choice of language.

Let not the reader, however, evoke the shade of Malibran or Grisi to serve as standard of comparison, or disappointment will be his lot, for remarkable as is the performance of these little apes, it enters only upon the ground floor of music; the simplest expression of song, "the uttering of inarticulate sounds in musical succession," as the dictionaries put it, upon which the whole sublime variety and range of the human voice have been built up. The most accomplished vocalist among gibbons can do no more than compass the rising and falling scale of the octave. And this, indeed, is wonderful enough. That the lowest of the anthropoids, whose kin may have existed in the Miocene period, so far away in geological time that it matters little whether it be reckoned in hundred thousands, or in millions, of years, should exhibit vocal sounds, succeeding each other in the numerical relation which constitutes the basis of all music; here, surely, is wonder enough.

Not all the species of gibbon may be

said to sing; all of them have powerful and sonorous voices, but the wauwau (*Hylobates leuciscus*) and the ongka, or active gibbon (*H. agilis*), are the only ones which seem strictly to fall within our category. And while exactness of conclusion is hardly possible, from the fragmentary observations which have been recorded, a study of the one specimen of *H. leuciscus* which has come under the writer's notice leads to the opinion that this species may be less accomplished vocally than was the one described by Professor Owen, for the young individual which lived for two years in the gardens of the Zoölogical Society of Philadelphia was never heard to attempt the descending scale, although a large part of the ascending notes were frequently and properly rendered. This observation accords with Mr. Darwin's statement in the "Descent of Man," that his son had listened to a young *H. leuciscus* in the Zoölogical Gardens at London, which correctly repeated three notes, with their semitones, of the ascending scale.

A disposition to critically study this little anthropoid was greatly stimulated by his attractive personal qualities, and much time was spent in his company. The camera was freely used, and among the photographs obtained * was a fortunate series of three, one of which is here reproduced showing him at his top note.

Mr. H. O. Forbes, in his excellent book, "Wanderings of a Naturalist in the Eastern Archipelago," has rendered this call, phonetically, in a manner which, slightly altered by the present writer, is as follows: "Woo-ut—woo-ut—wüt - wüt - wüt - wüt - wüt,"—the short syllables rapidly rising in the scale. At times it was uttered with a peculiar resonance which has been well termed "bubbling," for it is very suggestive of the passage of liquid through a narrow orifice; and when so produced it often rose to a pitch so high as to fill the air with vibrations, and to become unpleasant within a room.

It was often possible to induce this cry by imitating it close to the animal.

* These photographs were taken by David McCadden, taxidermist of the Academy of Natural Sciences.

At other times its voluntary repetition was so frequent that it was not easy to assign any special emotion to it, by way of cause; and with due regard to the caution which is necessary when dealing with questions of motive in the lower animals, the most that can be said is that the cry occurred when the animal appeared to be satisfied with, or in harmony with its surroundings, and to that extent it may be taken to signify pleasure. Indeed, one may doubt if the cries of wild animals have, in general, any mental correlatives which can be more closely defined than the broad ones of pleasure, pain, and anger; however much of investigation has been expended upon their psychology, the writer, for one, cannot consider that much exact knowledge has yet been gained, or that many of the conclusions reached are beyond the possibility of error.

There is aptness in the Greek generic name of the gibbons, *Hylobates*, meaning literally, "those that haunt the woods," for of all the tailless apes they are the most tree-loving and the most at home among their leafy shades; in fact, among all monkeys, none are perhaps more arboreal, unless it may be the South American spider monkeys. There are about half-a-dozen species commonly admitted by naturalists, although the variation in color among individuals is so great, and so little is known of their changes with age, that their classification is at best uncertain.

From Burma and Siam they are found through the larger islands of Malaysia; one species only, that which is here represented, ranging as far east as the Sulu Islands, the westernmost of the Philippines. They are all black, dark brown, or gray in color, sometimes with white or gray whiskers and frontal band.

As they are lowest in organization, of the manlike apes, so are they least in size, the siamang alone being some three feet in length of body, none of the others much exceeding two. The arms are long in all anthropoids, but in the gibbon they relatively far exceed even those of the orang. Taking the length of the spinal column as the unit of comparison, they are, in proportion, twice as long as those of man. When standing erect, the gibbon can place the tips of its fingers upon the ground without bending the body forward. As

its most rapid mode of progression through the forest is to swing themselves through the air, twenty feet or more, from limb to limb, precisely as in the gymnasium feat known as "the flying trapeze," this enormous length of arm enables one to understand the statement that, when startled, a troop of gibbons will disappear through the trees with the rapidity of a flight of birds. The whole muscular activity is rapid, and in captivity there is a frog-like suddenness in their movements from place to place about the cage which has in it something strangely ludicrous.

As far as we are able to learn the disposition of the gibbons from the few which have been kept in captivity, they are timid, gentle and affectionate, though in intelligence much inferior to the orang or chimpanzee, a fact which corresponds with their flattened and less convoluted brain.

Our specimen took delight in the company of those persons whose faces were familiar to it, and during the whole course of its life in the Gardens never showed temper beyond a moment's pettishness at some disappointment, showing therein a striking contrast to the stormy gusts of passion to which even very young chimpanzees and orangs are subject. The writer always recalls with pleasure a rainy Sunday morning, some years back, spent at the Zoölogical Gardens in London, in company with two young *Hylobates lar*, who sat for a long time, one perched upon either shoulder. Cleanly, kind, and full of confidence, it would be hard to imagine two more engaging pets. Unfortunately, of all the anthropoids, these are the most frail of constitution, and live but a short time in captivity, even in their native land.



The Gibbon Ape.

A BIT ABOUT BASS.

By E. W. Sandys.

WHEN soft June airs rustle the leaves of uncounted growths, when birds are busy with their young, when lakes flash like gems, and the larger streams run clear and slow, then come the days of the bass fisher. They are, indeed, halcyon days, when it is good for a man to be out of doors, enjoying to the full the glorious sunshine, the bursts of bird music, and the beauty of the world at its best.

There are two varieties of the black bass, the small-mouth and the large-mouth. Both are good, and both are game upon any sort of tackle. There have been many discussions over the relative merits of these two fish, but to my mind the small-mouth bass is much the better fighter, and far superior to his cousin upon the board.

Both varieties of bass are widely distributed. The waters of the Great Lakes system abound with them, and one or the other may be found in most of the important lakes and rivers of the Northeast, East, and Southeast. In Southern waters the bass is frequently termed "trout," but it is hardly necessary to say that he bears no resemblance whatever to the jeweled beauty of which so much that is true and false has been written.

While I and many other anglers may be safely set down as admirers of the brook trout above all other fresh-water fish, it does not follow that the bass is greatly, if at all, inferior to the spangled beauty of storied fame. The trout is an aristocrat of his race, a gaudy gallant, a swell fellow in fish circles, yet game and clever as your highbred gentleman should be. The bass may be taken to represent the sturdier upper class. Grim, stout, and self-reliant, he prefers to depend upon his own fearlessness and rather rough and ready methods to carry him through. He goes into a scrimmage as though his heart were in the right place, and his hurricane tactics and defiant struggle never fail to command respect.

When in the humor no fresh-water fish will bite more freely or force the fighting faster. All he asks is a fair field and no favor, and when he yields to a skilled hand the successful angler

has every reason for a little self-gratulation.

But the bass, while a voracious feeder, is frequently capricious over his choice of food. What he will greedily take one day, he may, for no apparent reason, refuse the next; hence he frequently is a puzzle to all but the most resourceful of anglers. This uncertainty about appetite is one of his marked peculiarities, and to get the better of it may tax the angler's skill to the utmost.

To judge from my own experience, I should class the natural baits, as crayfish, minnows, and worms, for all-round effectiveness in order as named. The white larvæ of the cockchafer and the bee frequently prove deadly. Grasshoppers caught near the stream often prove irresistible, while a small, green and lively frog is by no means to be despised. Plump worms are good, if the hook be liberally supplied, and a big bumble-bee may land a trick.

I use the standard bass hooks upon fine gimp or heavy gut. These are large and strong and admirably adapted to their purpose. In baiting with worms I put on plenty, looping them here and there and leaving a half inch of head or tail free. When using minnows (shiners are the only reliable ones), I pass the hook in at the mouth, then out through the gill, and finally bed the barb in the flesh just above the tail. This is the reverse of the usual way; but I find it answers very well. I keep the bait moving in a natural headforemost manner by means of a slight turning of the wrist. A bass seizing this bait, will either grab it crosswise or by the tail, and then bore toward his stronghold before swallowing. If given plenty of time he will flirt the minnow around so as to take it head first in swallowing. This is natural, but I do not wait for it.

Upon the first twitch I strike sharply and trust to luck. The bass has the minnow either crosswise or tail first in his first grab, and in either event the hook has two chances of taking hold. Two to one is good odds, and I trust to it. If given time the bass will reverse the bait, and in so doing he may find either the hooks or the gimp, and promptly reject the imagined dainty. When hooked

head upward the minnow plays in a natural manner ; if hooked merely through the lips it may be taken without giving a chance to plant the barb firmly, and good minnows are scarce. If hooked first through the lips and then through the skin of the back, or the back fin, there is still a goodly portion of it at which a fish may grab with impunity. Therefore, I hook the bait as described, and strike at the first sign, without giving any chances for gorging at leisure and subsequent trouble in removing a fairly swallowed hook.

When using white grubs I pass the hook in at the mouth, or just below it, and on to the tail. This gives a natural curve, which few bass can resist. When the bait is crayfish I pass the barb in at the mouth and through to the tail. This also gives the important natural curve, and a bait so rigged and sent down with Mr. So-and-So's compliments, is well-nigh irresistible.

Another important point is that baits so rigged may serve two or three times. This is no trifling matter, when fish are biting freely. As a rule, crayfish, frogs, minnows, and so on, are difficult to secure in numbers, and the more service one can be made to render, the better. And furthermore, a bait so rigged will almost invariably slide up the gimp, or the gut, at the fish's first rush, and so be preserved to do another turn. This, too, is important.

When using a frog I pass the hook first through the lips and then through the skin at the juncture of the legs with the back. In this position the frog can kick out and swim more or less, and in so doing make himself the more attractive. The grasshopper and the bee may be hooked crosswise behind the wings, and so serve their purpose.

The rods, reels, and lines for this bait fishing may be selected from the stock of any first-class tackle-shop. Tell the dealer what you want the tools for, and he will consult his own interests by properly supplying you with the best he has. Creels are an abomination for bass fishing. If one be fishing from a boat, raft, or, as often happens, from the shore, his best plan is to string his fish upon a stout cord with a suitable cross-piece fastened to one end so as to prevent escapes. This string can be fastened to the boat, or to whatever root or snag may prove convenient, and the

tethered fish may be kept alive and moved at will until the day is done.

The fly-fisher will probably find his best sport during the latter half of June, before the sun has warmed the water too much. Useful flies include the following : Rube Wood, Furgerson, Henshall, Seth Green, Chubb, Chenée, Coachman, Silver Doctor, Lord Baltimore, Polka, Oriole, Grizzly King, Montreal, Magpie, and Parmachenee Belle.

Various spoons and artificial minnows, too, occasionally prove deadly when trolling, or whipping with the rod. The best way to prove their merit upon a certain day and water is to try them. If they prove attractive, well and good; if the reverse, try something else. Bass are capricious.

Trolling with the long hand-line is, upon many waters, a deadly method. For this I use a braided line and the standard silver and gold spoons—the former for bright and the latter for dull days. If one can hire a rower, so much the easier, but he is not a necessity. I usually do my own rowing and take a turn of the line about the right leg, above the knee, where it will be within easy reach of the right hand.

By this method the hands are left free to manipulate the oars, while one cannot fail to feel any attack upon the spoon. And here let me say that the slightest pull upon the line should receive prompt attention. It may be caused by a fish, a snag, a weed, or by touching bottom. If a fish, well and good ; if a snag, at once check forward motion, then back up to the hook and free it ; if a weed, as is frequently the case, pull in and clear the hooks, for there is no use whatever in dragging the smallest fragment of green stuff, as no sane bass will take a hook so decorated.

My favorite craft for trolling is a canoe, as it is easily managed by one who knows the peculiarities of the craft. I attach my paddle to a stout cord so that it may be dropped and recovered at will. The line is made fast to a thwart and looped about either wrist, or when not smoking, which is seldom, is held between the teeth. A bass is so impetuous that he is almost certain to hook himself and to afford plenty of time for the hands to assume control.

The size of the bass taken depends more or less (usually *more*) upon the imagination of the fisherman.



"THIS PLACE LOOKS BASSY, EVERY FOOT OF IT."

Some of the finest bass I have ever seen were taken on trolls from lakes St. Clair and Erie, and, perhaps, the very largest of these may have weighed six pounds, and this by careful estimate. I have killed fish which weighed plump five pounds upon tested scales, and this some hours after the fish had been taken from the water, which means that, had they been truly weighed at the moment of capture, they would have scored a bit more. Taking the statements of recognized authorities upon this subject, the superior limit of weight of the small-mouthed bass may be set at about eight and one-half pounds. The large-mouthed variety runs much heavier, twenty odd pounds being quite possible. If those who speak positively of small-mouthed bass of eight pounds or so would only bear in mind the fact that such fish must needs be about two feet long, there would be fewer exaggerators.

Another matter about which many misleading statements have been made is the leaping power of the bass. Some writers speak of leaps four or five feet high, as if these acrobatic performances were common occurrences. This is all wrong. The small-mouthed bass certainly can and does leap freely, both when at play and when struggling upon the hook, but I have yet to see a hooked fish rise more than at most three feet above the surface, except it be whizzing shoreward at the end of some novice's tackle. The large-mouthed fish will rise to the surface and thrash about, but I have never seen one leave the water in any considerable leap.

Now let us glance at one of many golden days in which the bass have played the leading and the writer the misleading part.

Imagine a perfect June morning, with the air full of sunshine, song, and sweetness. It is not so very early, for I am lazy anyway, and bass are not much better. Fly and bait tackle, and plenty of worms dug the night before, are in the canoe, the old dog leads the way, and presently we are off, the dog in pure content, I in flannel shirt, old trousers, soft hat, and broken shoes. There is no cramping style about our outings. We are out for the fun, and we are going to have it or find out why.

The canoe slides rapidly for a mile before the first likely spot is reached. The dog can translate *Quo Vadis*, and

could he talk English would say, "I know—you put in under yonder tree, and you try the big, half-submerged log." He, being captain, must be obeyed.

While the rods are being shipped up, some big fish strikes at an unseen quarry, and makes broadening circles upon the oily water. This settles the matter of fly or bait, and soon the daintier tool is sending the feathered deceits over the promising spot. Fly after fly is tried in vain, then an artificial grasshopper is substituted. This provokes a rise, but the fish is only curious, and has no intention of taking hold. Presently the fly-tackle is laid aside, and the bait outfit brought into service. Fat worms are strung upon the hook, and sent to where they should do most good, but they tempt nothing, and presently the canoe glides on.

This trying of point after point along a pretty stream is to me the best of bass fishing. The nature of the fish impels it to ambush itself in the shelter of sunken stuff, piles, big stones, and the like; and from these hides it lances forth upon whatever prey may happen within range. An oily roll upon the surface, or a faint, swift streak in the water may betray the lair of the black buccaneer; the next thing is to find out what he is after. It most frequently is a minnow. Try one; should it fail, try something else, and, if needs be, keep on trying until you light upon the popular item.

The crayfish should do the work when nothing else will tempt. This bait hides under sunken stuff, stones, etc. Why it craves seclusion might be explained by any sizable bass. To secure the crayfish, cautiously raise sunken stuff until the nipping fellow is revealed upon the bottom, then steal a hand toward him until he can be secured. There is an art in this which can be mastered only by practice. The nip of a crayfish is a trifle which cannot hurt any hand fit to wave the wand of a true angler. Do not worry about the crayfish which escape and go darting tail first to deep water. They, if they be wise in their generation, will soon come hustling back, for a big-mouthed black peril haunts the outer shades.

The canoe glides on to another promising spot where a sunken tree is overhung by the canopy of a sturdier mate. This place looks bassy, every foot of it,

and worms are sent farther and farther from the tree until the accessible water has been covered. Then a halt is called for fifteen minutes' smoke upon the bank, during which everything quiets down. Meanwhile, eyes are busy watching the water and deciding where the next trial shall be.

A medium-sized crayfish is selected, artistically impaled, and sent upon its mission. And now comes bass-fishing that is bass-fishing! A dusky demon has been lurking out there all this while, and he hoists his piratical flag and clears for action.

Zip! Whish! The lithe rod curves almost to the breaking-point, the silk cuts the water in a fierce zig-zagging, the restraining thumb is lifted from the reel, and its thin, metallic voice rises in that grand old song which only a good reel can sing. Now for it! Away he goes, and yard after yard of line hisses through the guides. Check him! You might as well try to check a wild engine with a pack-thread. This first mad rush is all his and he *will* have it. Forty yards away he pauses for a moment to consider. Long distances are not his forte. He is getting away from his favorite lair, so he suddenly concludes to come back.

This is a critical moment, for woe be to the rod's chance if he can get slack. Rapid reeling and the wonderful spring of the dainty wand prevent this. Again and once again he steams away, only to be steadily hampered by that delicate yet persistent force which, though ever yielding, never yields outright.

He comes to the surface and lashes the water into a snowy spume and fails. For an instant his massive shape is plainly revealed; then, like a glancing light, he is off again. This time his run is shorter, for he knows such tactics will not avail. Another pause, a couple of savage jerks, and then he bores down and down in a desperate endeavor to reach the friendly bottom where he can rub from his jaw its troublesome jewelry. But the steady lift of the rod halts him, and baffled once more, he decides to try his best ruse. He is mad all through, and he will find out who or what dares to thwart his royal will.

Zip! Up he comes as though flung from some submarine torpedo. There are a swish and a splash, a scatter of shining drops, a glimpse of a gleaming

bronze shape a yard above the surface, then a plunge, a sullen wallop, and he is gone. Next he remembers his favorite shelter and darts for it. Once there, among the twigs which so often have sheltered him, he surely will get rid of the thing which is driving him frantic. Vain hope! The unseen power drags and drags at him: do what he will, he can go so far and no farther. It is outrageous, it is monstrous, and he will now see about it once and for all!

Up he flashes and for the first time sees the cause of the trouble. "*It*" is outrageous and it *is* monstrous. Something awful is standing upon his favorite log. It is bigger than the lazy old sturgeon which he once met in the lake below. It has terrible eyes which glare with ferocity; its tail is all split up and it stands on the two tips; its fins are long and utterly unlike any fins he has ever seen!

For the first time in his life he experiences fear. What! Go near that hideous monstrosity? Not for all the crayfish and shiners that ever lived would he again look at that damnable form which stands there like a tree and waits.

In his terror he forgets all his tricks. Any way, and any place rather than nearer that thing, is his thought as he darts to and fro and strains for dear life. The crayfish, the accursed cause of all the trouble, slips from his jaw and rises above him, but he cares naught about the loss. He jerks and backs, snapping at the curious affair which clings to his jaw; he sweeps his broad tail from side to side in a life or death effort; then a deadly numbness steals over him and soon a glare of light tells him he is at the surface, yards from his dearly-loved retreat.

Through a film of water he sees the thing again. He is dimly conscious that it is moving now and that it appears ten times worse than it did before; then, with a despairing, gasping shudder, he turns upon his back too weak for further struggle, too terrified to more than wiggle his fins in feeble protest.

He feels some crushing things close between his gills; he misses the life-giving water, and in a mingled agony of fright and rage he strives to rouse himself for one more effort. He stiffens his late invincible armament of spines in vain. Something rasps between his

gills; again he feels the water, and weary and faint of heart as he is, he can yet endeavor to reach his home. Vain hope. Some all-powerful restraint holds him, and after sullenly tugging for a while, he gives up and awaits his final end, like the heart-broken captive king he is.

No more sport for the present at this place, so the canoe glides on for a hundred yards or more. This time it pauses at the mouth of a small stream famed for its bass. A brace of good fish are killed here, and then, stage by stage, from one well-known point to the next, the sport is continued.

In time a rest is decided upon, and man and dog seek a soft, grassy slope, where they divide their lunch. Then follows a period of sweet content, while the two lie there in brotherly peace. With his shapely nose resting upon his master's leg, the dog sees through half-shut eyes the sleepy river, the creeping shadows, and the birds flitting to and fro. His sensitive ears twitch in response to the plash of a leaping fish or the hiss of a rapid wing. Not for worlds would he move, for this to him is heaven, so far as his grand nature can understand it.

And the man—he just lies there, seeing through faint wreaths of smoke the beauty and the glory of it all. He, too, hears the plashing fish and by its sound he knows its name and lineage. The fluting of birds, the hum of insects are in his ears, and from all the sweet confusion he can identify every sound that floats upon the scented breeze.

Hark! From some field above comes a mellow piping, "Bob-white! Bob-bob-white!" Dog and man hear it together. The smoke ceases curling upward, while the dog half raises his head. "Bob-bob-whi-te!" Louder and clearer rings the call, and the dog's grand eye rolls round till it catches the amused glance of his master. The mute exchange of glances is pregnant with meaning. No further movement is made, for the leaf must turn and that call be changed before the full magic of it can assert itself.

The shadows creep on and on, until, at last, the man moves. Like a flash the dog is upon his feet and fairly dancing in sheer delight. Fain would he go to further investigate the cause of the whistling, but a word restrains him. Once more the canoe is pushed off, her shapely nose this time pointed homeward.

On and on she steals, faint music whispering from her bow and from the trailing bass astern.

"The day is done, and the darkness
Falls from the wings of night."

The raven broods the earth, but still through the scented glooms bird-vespers are sighing soft farewells to what has been a perfect day. The dog is curled up in lazy content, the man kneels in the stern, sending the slow paddle stealing along the side. Behind him floats a filmy wreath, rich with the subtle spice of his offering to Diana, then canoe and all vanish into velvet shades, the queen-star dances on a fading wake, and my golden day is over.

A JUNGLE DUEL.

By A. H. Waddell.

A SHORT time ago I read with much interest an account of a "battle royal" between two bucks in the Maine woods. Fights of this description, among wild animals in their native haunts, are by no means rare, particularly in the breeding season, but it is not often that one is privileged to witness such a combat.

During many years' residence in India, and traveling and hunting expeditions in other lands, I have seen several instances, and I will endeavor to describe

one, the like of which I shall most likely never see again; and, from the locality, surroundings, and good fortune which attended me on the occasion, a similar contest has probably never been witnessed by any of the big-game shooters, even by those who have spent years in the jungle.

I was sitting on the veranda of my bachelor quarters at ———, Southern India, mechanically puffing at a Trichinopoly cheroot and lost in the excitement of a stunning French novel, when

I was disturbed by the "Salaam Sahib" of a soft, mild voice at the other end. I knew in a moment it was Ramiah, my head "shikarry" (hunter). "Salaam Sahib," he repeated with a most graceful, low-bending bow, when he caught my eye.

Then straightening himself and salaaming again with both hands, he proceeded to inform me that he had "boat atcha kubba" (good news of game), tigers in this instance. "Do bagh, Sahib" (Two tigers, sir), he continued, his keen black eyes sparkling, and his soft voice full of suppressed excitement and confidence, for Ramiah always became confidential whenever he found that he had touched a tender chord in his master's heart; he had touched one this time and he knew it, and was making hay while the sun shone.

Ramiah, I may state, was chief (in my eyes) of all my servants, the big adipose Madrasy butler not excepted, for not only was he the most accomplished shikarry I have ever known, but he was faithful, and had absolutely no fear.

He had found me more game than any other man had ever done, and on one occasion had saved my life at the imminent risk of his own, when both barrels of my .500 express had failed to stop a charging tigress, and I was lying stunned and helpless at the mercy of the infuriated beast, who stood over me, badly wounded and contemplating in her intensified rage whether to tear me to pieces, or yet, while she had strength left, expend that power upon my faithful shikarry, who was hurrying towards her.

It was Ramiah, too, whom I saw first when I recovered consciousness, and it was Ramiah who, in some mysterious way which I was never able to understand, had succeeded in killing the tigress with the hunter's knife I had given him some time before, of which he was intensely proud.

Let me, however, return to the veranda. Ramiah proceeded, with many gestures and much pointing, to describe the exact position of a certain village some forty-five miles away; and as he grew interested in drawing his aerial map, he succeeded entirely in portraying a picture which I readily understood, and in which I saw sport, fun, a snap of danger, a tinge of glory and an element of disappointment.

It was in the hot weather, and my shikarries were out looking for game. Ramiah had been in the heart of a well-known tiger district, but for some reason or other tigers were scarce that season. The monsoon had been very heavy and water was plentiful, consequently big game were scattered, and tigers in particular.

Ramiah had heard of two in the neighborhood of the somewhat remote village he had indicated, and had gone there to get kubba (news). He found that there were two, a tiger and tigress, hanging around the place and apparently hunting together, a very uncommon procedure on the part of tigers, which generally seek their prey alone. These beasts had become pretty bold, had killed several water buffalo (the native ox of the country) belonging to the "ryots," or little farmers; and, to add sorrow to insult and injury, one of them had walked off with a "chokera" (little native boy) a day or two before Ramiah arrived at my bungalow.

The villagers were in great distress, he told me, and had sent "plenty salaams to master," begging him to come out and kill the tigers, which, I need scarcely add, I readily consented to do.

I applied for leave immediately, and that night saw my "kit," tent, rifles, etc., in charge of Ramiah on the march to the beleaguered village. I started at dawn next morning on my favorite jungle "tat" (pony), which was a half-bred dun-colored Kathawar, blind of one eye, ewe-necked, flat-sided, crooked-legged, short-tailed and vicious, but untiring and unkillable; he was the toughest and ugliest beast I ever owned, but as hard as armor plate, and invaluable as a shooting pony.

We rested under a "tamarind tope" in the middle of the day, and arrived at camp before dark, where I found my tent pitched, bath ready, and everything prepared as if by the hand of some sweet girl who really had my comfort and welfare at heart.

Verily, the mild Hindoo is a great servant; it matters not what you set him to do, he can do it, and do it well. I have had as good dinners in the heart of the Indian jungle, and as well served, as I could have had at an expensive hotel, wine not excepted.

I know of nothing on earth to compare with the downright pleasure of a

three months' leave on a big-game shooting trip in India. You take everything and everybody, from butler to "tennyketch" (cook's helper), and there is nothing forgotten, from novels to playing-cards, soda water to champagne.

On this occasion, however, I was not so particular; I smelt something a little out of the common, nor was I disappointed. Ramiah was at my tent before dawn next morning, sitting on his haunches waiting for me to get up; and upon my doing so told me that nothing had been seen or heard of the tigers that night, and suggested that I should lay up that day, "tie up" for them at night and wait results.

By "tying up" is meant "baiting," and consists in buying cows or water buffalo, in the case of tigers, from the natives, and tying them up to trees in the "nullahs" or dry water-courses or other likely places in the jungle. They attract the tiger if he is in the neighborhood, and after he has killed one and satisfied his hunger he retires into the thickest part of the jungle, sleeps through the day, and then comes down again at night to replenish himself from the carcass of his victim of the night before.

This he is sure to do if left alone and not disturbed, but it is seldom that he is left to enjoy his sleep in peace and comfort, for at noon, when the sun is hottest and his sleep the soundest, he is surrounded by a cordon of beaters, who bring their native musical instruments, tom-toms, antediluvian flint-locks, etc., with them; and, having received the word, close in on him in a semicircle, making the jungle resound with their shouts, songs, music and fire-arms.

The hunter is posted at the only part that is free for the tiger to escape without breaking through the beaters, so it is to this quiet spot that he always makes, either to meet his death or else a foeman worthy of his steel.

I objected to the shikarry's suggestion on this occasion, for I felt convinced that as the tigers had not been disturbed they would return to the village for more cows or more boys, as the case might be; and as the moon was up and the nights very light, I decided to be polite and sit up to receive them.

Accordingly I bought a young cow, and in the evening, when all the others had been driven into the huts, this heifer

was left out, and later on brought into a kind of inclosed yard with low mud-walls, at the end of which was a native hut.

The place answered admirably for my purpose; there were no trees, the ground was level and the coast was clear.

I had instructed the natives to make no noise and to leave it all to Ramiah and myself. Accordingly, just as the "long, long Indian day" was gliding softly and almost imperceptibly into the short, swift fleeting hours of night, the heifer was brought to this yard, the sun-baked mud walls of which were about three feet high.

Just before the sun went down, Ramiah and myself clambered onto the bamboo and palm-leaf roof of the hut, keeping well out of sight on the farther side and making ourselves as comfortable as possible under the circumstances. Ramiah was at one end and unarmed, except his knife, which he almost worshiped and invariably wore; myself, with a .500 express, a short distance from him.

It became intensely dark in a few minutes, then the wretched cow began to bellow piteously; and as I lay there and the huge bats and inquisitive flying foxes ever and anon skimming noiselessly by, at times almost touching us with their vampire wings, I felt as though the moon would never rise, and was fearful lest the bellowing heifer would bring the tigers down before I should be able to see them. At last, however, a silver streak in the east proclaimed the coming of the Queen of Night; and it was only a few moments before she arose in all the glory of her Oriental splendor to silhouette the fantastic and silent figures of the tall and stately distant palms, and give me the longed-for light.

We must have been lying there, hidden as best we could by palm leaves, for an hour and a half, when Ramiah, with an almost motionless sign, drew my attention to a couple of dwarf palms. He had seen a tiger pass from one to the other. A moment later I saw him for an instant, and then lost track; he seemed to have gone back. We waited and waited, when all at once I saw a tiger crouching along towards the far end of the enclosure nearest to Ramiah; he was about a hundred and fifty yards away.

On came the tiger, or tigress really as she proved to be, till she got close up to the wall and out of sight, so near did she keep to it. Then all at once, and without a moment's warning, a tiger jumped over the wall on the opposite side.

The tiger crept slowly up to the heifer, crouching low on the ground, exactly like an enormous cat stealing up to a bird or mouse. His tail was carried straight behind him on the ground. Sometimes it gave a nervous twitch, which seemed to denote that he was ready for his spring. His legs would gather under his body, and you would have sworn he was going to make his bound; but no, he would alter his direction and creep on a little farther.

At last he was in the right position; he had judged his distance to the inch. His bound was sure, his aim was true; he landed with a low growl on her shoulder, seizing the back of her neck as he did so with his teeth, and, placing his enormous paw across her nose and face, gave that awful wrench which dislocates the neck and kills instantly.

The impact must have been terrific, for she went down as if she had been shot, with the tiger on top, and she never moved a limb.

At this moment the tigress we had seen first, leaped over the wall just about opposite to where the tiger had, and walked leisurely up to where her lord and master was calmly lying stretched out facing his victim.

I honestly believe I could have killed them both, right and left, for the light was excellent; but the play was too interesting, and I could not ring down the curtain yet.

The tigress then lay down and the tiger got up, and after walking round the carcass of the cow several times, and what appeared to me to be smelling it, he seized it by the neck close down to the body and dragged it to the wall at the place where he had jumped over. He then elevated his head, still retaining his hold upon the cow, and looking up over the top of the wall, and gathering his hind legs beneath him, he made one or two attempts to spring, just as a cat does when trying to jump onto a wall. At about the third crouch he jumped but did not quite succeed, and fell back, cow and all, into the enclosure.

He soon got up and made another attempt with the same result.

On this the tigress came up, and seizing the cow just as the tiger had done, crouched and bounded onto the top of the wall, and then jumped down the other side, dragging the cow with her.

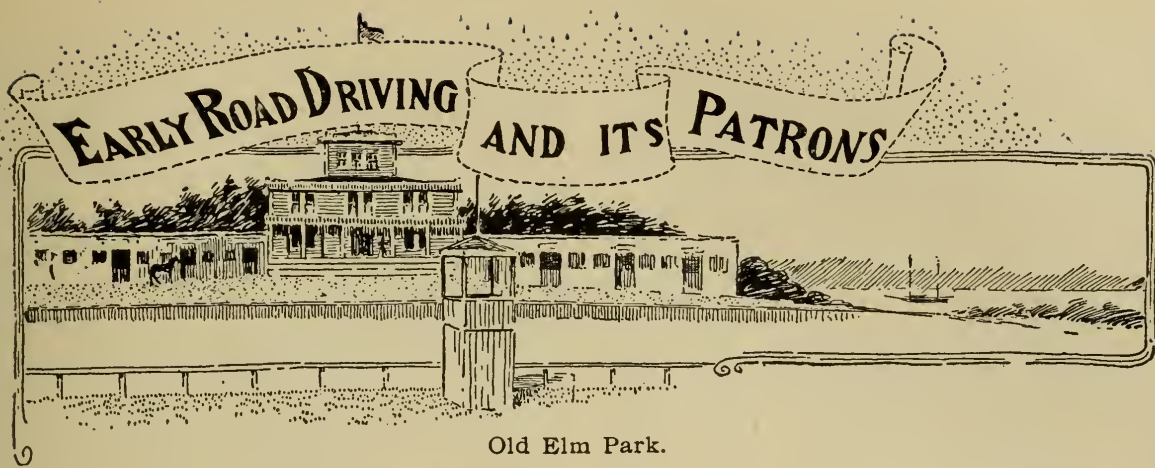
Immediately the tiger sprang up with a frightful roar, bounded over the wall and attacked the tigress furiously.

My pen must ever fail to express what followed then. The tigress received the tiger's charge with a terrible hiss, and was onto him in a minute. They stood up and tore and clawed, the tiger appearing much bigger than the tigress. Now he had her by the shoulder; now she was fastened onto his throat, but they did not seem to hold. In another instant the tiger had the tigress on her back, and his head appeared buried in her bowels; she was clawing him fearfully down the flanks with both hind legs, while she struck and tore his shoulders and sides with her fore ones.

The tigress appeared to me much the more active of the two, as she was evidently the stronger; she bit and tore again and again, charging the tiger with all the fury of madness every time they seemed for an instant to be relieved from each other's clutches. I could plainly see that the fight was *à la mort*, and the tigress too much for her older and less active mate.

For one moment they separated, and then, with a charge which seemed to me to carry all the wild deviltry of which her frantically savage nature was capable, her jaws wide open and grinning, the angles of her mouth drawn back, with a hiss that scattered the blood and foam from her nose and mouth, the tigress hurled herself upon her companion, her hunting partner, her mate, and, seizing him by the throat, left him dead, stretched upon the crimson sand.

The tigress knew he was dead; she knew she would soon be dead herself, for she was mauled beyond recognition. As she sat there unsteadily upon her haunches, and rooted as it were to the ground, I gazed a moment longer upon a sight I shall never see again; then a "crack" from my rifle, straight for the well-known spot, the second stripe behind the shoulder, about half-way up, laid her, without a struggle, peacefully beside her dead lord.



By Nathan A. Cole.

THAT the trotting horse should be the recreation and pride of the American merchant prince is eminently fitting, for each is of native development. Each is eager, alert, enduring, and ambitious, and the one gives to the other just the diversion required. The man of action needs change but not somnolence, relaxation but not listlessness. The spirited road horse fits exactly into this niche of necessity. He provides mental stimulus and at the same time an occupation so absorbing as to leave no room for business thought.

The emergence of a considerable proportion of the most active-brained of the community from purely agricultural occupations into the wider conditions of

successful commercial life, marks the appearance of the trotting horse upon the scene.

While horses were bred in this country for light wagon use as early as 1786, and possibly before that period, it was not until about the year 1818 that the light harness animal gained much prominence in pleasure-driving. From that year and up to 1835 Major William Jones, Thomas Cooper, Hamilton Wilkes, William McLeod, and William Henry Herbert were conspicuous figures on the road. They assisted materially in bringing the trotter into prominence, and encouraged the breeding of what is now conceded to be the highest type of harness horse.

The first recorded mile better than



Lady Suffolk on the Old Beacon Course, Hoboken, N. J.
From the Original Painting by Chadwick, loaned by W. S. Cartier.

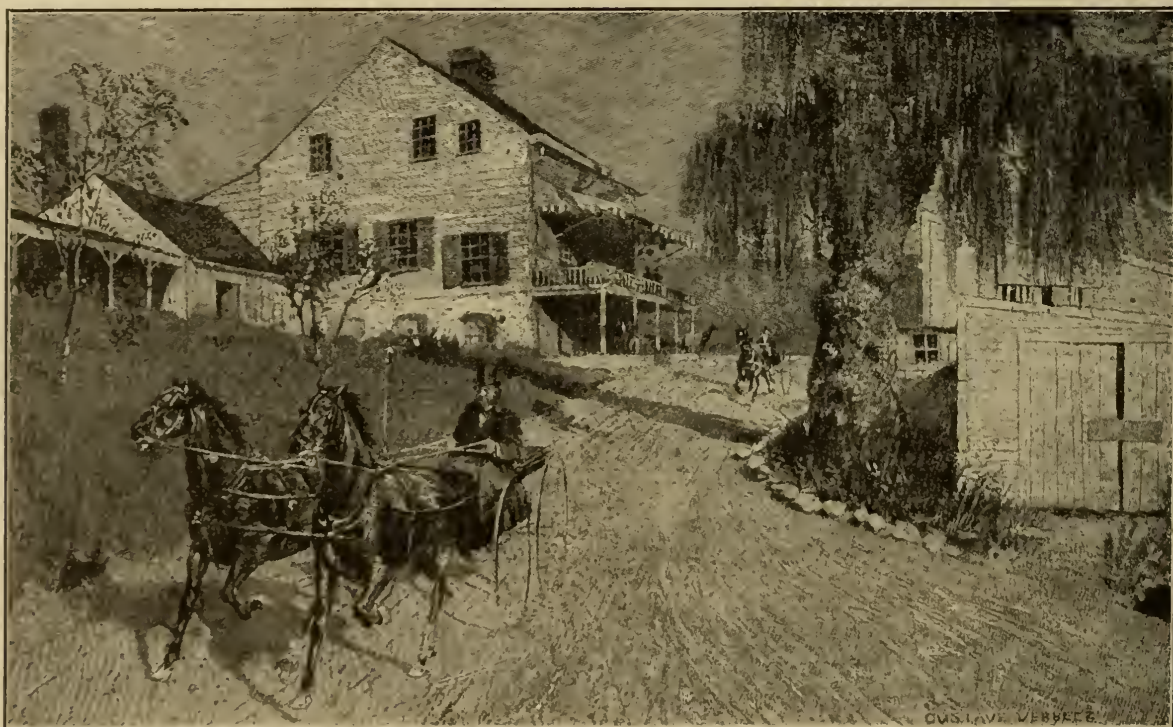
three minutes was made by Yankee, in 2:59, at an old Harlem track in 1806. In 1818, when Boston Blue trotted to a record of a little better than three minutes, it was recognized as a remarkable feat. As the *Chronicle* related after the contest, which was for a wager of \$2,000, "he won cleverly and gained great renown."

It remained for that prodigy of the early trotting world, Lady Suffolk, the little gray mare by Engineer, out of a mare by Don Quixote, to electrify the world by trotting two miles in 5:15 in a race at the old Beacon Course, Hoboken, N. J., June 22, 1838

The historic Beacon Course had been

old when she made her record of 2:29½. When she was sixteen years old she took a record of 2:26 under saddle. Out of one hundred and thirty-five recorded races she won eighty-three. She was the glory of the Beacon Course, but another notable performance over this old track was made by Fannie Jenks trotting one hundred and one consecutive miles in nine hours, fifty-three minutes and forty-three seconds.

As early as the year 1825 the interest in the trotter had reached so high a point in New York that a club was established for the purpose of "improving the speed of road horses." The organization was known as the New



The Old Barry Road-House.
From a Painting by Gustave Verbach, loaned by John Quinn.

established back so far as 1823, and was at this time in the hey-day of its glory, with a pretentious club-house built close to the grand stand of the track. In 1839 Lady Suffolk reduced her record for two miles to 5:14 over the same course. In 1841 she trotted two miles in a race, over the Centerville Course (L. I.), in 4:59; and the same year she trotted over the Philadelphia Course three miles in 7:56, an average of a little more than 2:38 to the mile. It was not until 1845, over the Beacon Course, that she established the first world's trotting record below 2:30 by winning a race in 2:29½.

Lady Suffolk was successfully raced for nineteen years, and was twelve years

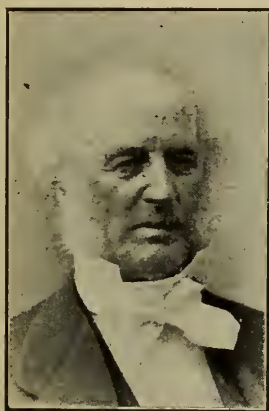
York Trotting Club, and a course for its use was constructed near the Jamaica Turnpike on Long Island. That it lived up to its charter is indicated by the fact that its races were heats of two and three miles, and were attended by people from great distances.

By 1835 road driving as a daily pastime, in contradistinction from track driving at stated meetings, had become quite the vogue; and matches were contested almost every day to wagon or under saddle, on what is now rail-be-straddled and car-ridden Third avenue, from Harlem to the Bull's Head (the present Twenty-fourth street horse market).

It was at this time that Commodore Vanderbilt became a prominent participant in road-driving. He was very enthusiastic, and owned some of the best-known and fastest horses of that day.

For ten years or more the sport was confined to gentlemen amateurs, but gradually the advent of the professional and spec- brought disrepute several to 1856, it ed.

In 1856 Bonner liam H. biltinfus- life of the intopleas- ing by impo- chases.



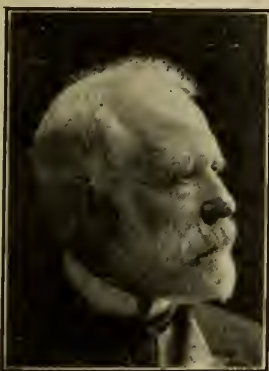
Commodore Vanderbilt.

action was followed by many others, amongst whom were Sheppard F. Knapp, Col. John Harper, William Turnbull, Joseph Harker, David Bonner, Major Dickinson, Frank Baker, and Frank Work.

The favorite course was along what was then uni- versally known as Bloom- ingdale Road, at that time a pleasant country driveway from the southwest corner of

Central Fort Lee and the road- was at ty-sixth few blocks what is man sq. Boule-

So en- and num- came the ers of the ingdale



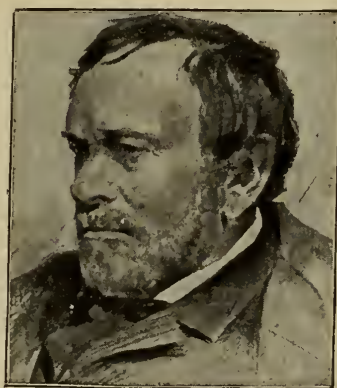
Benjamin F. Tracy.

another road-house was soon established by one Jones on a bluff overlooking the Hudson, the spot now occupied by the tomb of General Grant.

It is a singular coincidence that the great warrior whose remains lie buried where the most noted of the road trot- ters gathered was himself an ardent

ulator it into and for years, up languish-

Robert and Wil- Vander- ed new right sort ure driv- making tant pur- The ir



Col. John Harper.

Park to follow- Ferry; teach- popular a man h c use waysobey Seven- The Gen- street, a sided, a bove once to now Sher- pleaded and the vard. and paid fine.

thusiastic erous be- frequent- Bloom- Road that

admirer of the light harness horse, and owned one or more trotters from the time he was appointed to an official po- sition in the army. After his' return from the war he owned in Washington a little bay mare that could trot quite a bit faster than a three-minute gait.

With her he took frequent drives, and on more occasion ted her to some ave- than the it. On casion stopped liceman fied that berequir- pear be- certain trate the to answer

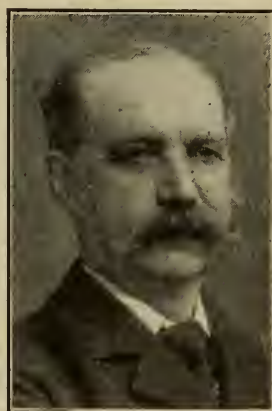


Wm. H. Vanderbilt.

than one permit- go down nue faster legal lim- one oc- he was by a po- and noti- he would ed to ap- fore a magis- next day to the

charge of reckless driving. The General thought no more about the matter until the same officer appeared at his headquarters the next afternoon and demanded that he appear forthwith. General Grant was at first irritated by the persistency of the officer and used some very plain language in re- ply; whereat the officer said: "General, I served under you at Vicksburg, and I am

ing your ing that should al- orders." eral sub- went at the judge, guilty, the usual



David Bonner.

to his first ration as of the States, one day

driving with Robert Bonner behind Dexter, then the champion trotter of the world. The reins were passed to Grant and he drove the great horse some distance at speed. After alighting from the wagon he feelingly said that he had just enjoyed one of the greatest pleasures of his life.



General Grant and Robert Bonner driving Dexter.
From a Painting by Erningher, loaned by Frank Ferguson.

Until a short time before his death, General Grant was a frequent visitor at that historic trotting-horse establishment, Stony Ford, in Orange County, where he spent many a happy hour in the smoking-room of Mr. Backman's residence, together with such men as General Benjamin F. Tracy, Hon. William C. Whitney, Messrs. Robert Bonner, August Belmont, and Sheppard F. Knapp. That smoking-room indeed enjoys the distinction of being the place in which the famous General and President smoked his last cigar.

Stony Ford recently passed into the hands of General Tracy, who continues it as a breeding farm for trotters. Everything about this farm reverberates with history of America's ideal horse. It was the home of Green Mountain Maid, in many ways the greatest of the great producing mares. It was likewise the home of her famous son, Electioneer, of Kentucky Prince, Messenger Duroc, Lancelot, and many others of distinction. These personal notes provoked by the locality will, I feel sure, be pardoned by the interested reader.

The Jones hostelry, so picturesquely located on the Grant Tomb site overlooking the Hudson, soon began to attract an undesirable element, and this developed an increasing desire on the part of the gentlemen amateurs to keep away those who had before degraded the sport.

To accomplish this a plot of ground was leased on Bloomingdale Road, a half-mile track constructed, and a pretty club-house built. The new organiza-

tion was known as the Elm Park Club, and it flourished for a number of years, until the property became too valuable to retain as a trotting course, and it was abandoned.

Again the tide turned from the track to the road, and Harlem Lane, as it was then called, but which will be to-day recognized only by its prosaic title of Eighth avenue, became the favorite course. There, too, a track in time was added to the

pre-existing road-house of Peter Du-bois, at Eighth avenue and One Hundred and Forty-fifth street, but, as had happened in every previous case, it attracted an element that ultimately proved fatal. Those who drove for pleasure gradually left, and finally, about 1868, its gates were closed.

The opening of a thoroughfare in Central Park had from the inception begun to divert pleasure-driving thereto; and when to the good roads of the Park there came the possibility of utilizing the splendid proportions of tree-lined Seventh avenue, from its exit at the Park, up to the Harlem River at the McComb's Dam Bridge, and thence crossing over into the beautiful suburbs which lie for mile on mile along the borders of Jerome avenue, it is no wonder that Seventh avenue became the gathering and show place of the cracks of the day, and Barry's old road-house, which had stood guard on the New York side of the bridge at One Hundred and Fifty-fifth street, ever since 1770, became the rendezvous of the élite of the road. It was a happy medium. Those who restricted their drive to a jog through the Park, and a spin from One Hundred and Tenth street, up the Seventh avenue to the bridge, found it as convenient as did those who made it only the beginning of a longer drive over the bridge into the country. It was a famous house, with famous patrons, and a famous landlord.

Billy Florence, who was one of the proprietors of the old Florence & Barry road-house, was a plain-spoken fellow

and frequently said things which rasped. One day Commodore Vanderbilt drove up to the hostelry. Florence came around the porch just in time to see one of the grooms backing a team out so that the Commodore's team could be driven under the shed. Florence was angry when the groom told him what he was doing, and blurted out, "Vanderbilt's team is no better than anybody else's. You put that team back and let the Vanderbilt team stay outside." The Commodore turned around and drove off across the bridge, in a huff; but he had not been gone ten minutes before he returned and said to Florence, "Billy, you were right and I was wrong." He continued to visit the old road-house until he died.

The old McComb's Dam Bridge, at the entrance to which was the Barry road-house, helped to make one of the picturesque scenes of the northern part of the city. That bridge stood for one hundred years, and was finally removed only on the commencement of the construction of the really splendid new bridge built by the city.

Gradually Seventh avenue beyond the Park became a city thoroughfare and speeding was driven to a short space on it beyond One Hundred and Twenty-fifth street. Even there the sport became fraught with many dangers, so that serious speeding could be indulged in only by crossing over McComb's Dam Bridge and on to Jerome avenue.

From Jerome avenue over the hills to old Fleetwood was a step as natural as that the enthusiastic and wealthy sports-



Edward and Swiveler.
From an Old Painted Plaque loaned by Gabe Case.

men should make yet one more effort, against the all-encroaching builder, to indulge in their favorite pastime under regulation conditions; and so came into existence the Driving Club of New York, and the building of a mile track at Fleetwood Park in 1869.

For nearly twenty years this club was the representative one of America, its membership including Commodore Vanderbilt, William H. Vanderbilt, Jay Gould, Robert Bonner, O. H. P. Belmont, C. N. Bliss, A. B. Darling, Abram S. Hewitt, R. F. Cutting, George B. DeForest, R. Goellet, C. Oliver Iselin, Brayton Ives, Ogden Mills, J. D. Rockefeller, Daniel Odell, W. E. D. Stokes, Frederick T. Steinway, William D. Sloane, William E. Strong, Rutherford Stuyvesant, Nathan Straus, Gen. Benjamin F. Tracy, G. Creighton Webb, and William C. Whitney. Gradually, however, a different

element obtained control, and the men who had established the sport on a respectable basis and had done so much to make it popular with gentlemen were seldom after seen at the club. Fleetwood lasted till 1898, when it was cut up into streets by the city's orders and abandoned by the Driving Club under that compulsion.

While the Vanderbilts did much toward bringing the light harness horse into prominence, it is a fact that



William H. Vanderbilt driving Maud S. and Aldine.
From an Old Painting loaned by W. S. Cartier.

no man ever contributed so much toward making it popular as the late Robert Bonner. The first team that ever trotted faster than 2:30 was one owned and driven by him. In 1861, Mr. Bonner hitched Flatbush Maid and Lady Palmer together and drove them a mile over Union Course, L. I., in 2:27. Flatbush Maid was a trappy-gaited, spirited mare, and Lady Palmer was a long-striding mare with an individuality very much like a thoroughbred's. Few persons would ever pick them out for a fast team. Commodore Vanderbilt then owned Plough Boy, 2:30, and Post Boy, 2:31½, and several other fast trotters, and there was considerable rivalry between him and Mr. Bonner. The daily papers gave a glowing account of what was then a wonderful performance by Mr. Bonner's team, and when the facts were discussed by the gossips it was reported that a number of Mr. Bonner's friends had got together and timed the team fast, just to tickle his vanity.

This naturally got to Mr. Bonner. He kept his own counsel for six months, and in the May following when a day's trotting was held at Fashion Course, L. I., he quietly arranged with the management to have Commodore Vanderbilt in the judge's stand. It was late in the afternoon when Mr. Bonner drove on the track with Flatbush Maid and Lady Palmer. After scoring down once, the word was given, and by all the watches in the stand they trotted two miles in 5:01¼, and the first mile was in 2:26. This feat, of course, put to rest all question as to the ability of the team.

Mr. Vanderbilt made several vain efforts to secure a hitch to beat the Bonner pair, as did many other gentlemen, but the record remained for several years.

From 1862 on, double-team driving became very popular, and was participated in by the men already mentioned, John D. Rockefeller, Frank Rockefeller,

Sheppard F. Knapp, and many others.

Mr. Bonner remained for many years the owner of the fastest horses in the world, including Dexter, 2:17¼, for which he paid \$35,000; Maud S., 2:08¾, which cost him \$40,000; Sunol, 2:08¼, for which he paid \$41,000; Edward Everett, for which he paid \$20,000; Pocahontas, 2:26¾, for which he gave \$36,000 and another mare, and many others of note.

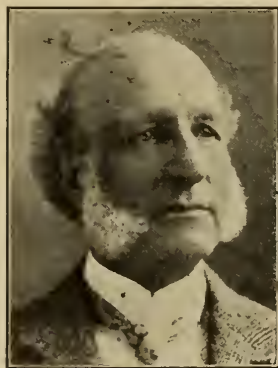
Pocahontas was a handsome mare by Ethan Allen, and out of the old-time record-making pacing mare Pocahontas, 2:17½. The younger Pocahontas was in-

clined to be headstrong, and after trying many plans to prevent her from running away, Robert Bonner quit driving her, and one day said to his brother David: "I wish you would go up to the stable and drive 'Poca.' Be careful, for she has got a terrible temper and a bad mouth." David

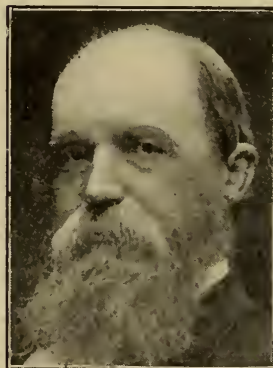
went to the stable, and when the mare was hitched up, found that the groom had put on a patent pulling rein and a severe bit. He had both removed, and instead of the pulling-rein, he put on an easy side-check and replaced the ugly bit with a common snaffle. She behaved well with him, and he continued to drive her almost daily for eighteen months.

It was some time before Robert ventured to ask how the mare was acting, and when he did David's reply that he would not be surprised if she could beat "White Wings" (Dexter) a mile up the road, almost took his breath. Pocahontas could trot a mile close to 2:20 to wagon, and in 1880 was driven a mile by Allie Bonner, a son of Robert, in 2:17½.

In 1882 Sheppard F. Knapp's team, Charlie Hogan and Sam Hill, trotted a mile to wagon over Fleetwood course in 2:21, and later in the same year Frank Work drove Edward and Dick Swiveler a mile in 2:16¾. In 1883 William H.



John Shepard.



The late Robert Bonner.



The late D. S. Hammond.

Vanderbilt drove Maud S. and Aldine a mile over Fleetwood in 2:15½. This was to a top wagon, and Mr. Vanderbilt must have weighed close to 200 pounds. It was a clever achievement, and one of which the railway magnate was pleased to talk of up to the time of his death. This mile was a public one and well authenticated, being also duly credited in *Chester's Trotting and Pacing Record*. It is the fastest ever driven by a professional or amateur under like conditions. Aldine has

a record of 2:19¼, and her fastest performance, aside from the one driven by Mr. Vanderbilt, was when she was hitched with Early Rose and driven by a professional, at Hartford, a mile in 2:16½. Aldine and Early Rose are spending their declining years in luxury at Newport in the stables and paddocks of Frederick W. Vanderbilt, a son of William H.

Maud S. was sold to Mr. Bonner, in 1884, for \$40,000. This sale was made to Mr. Bonner within a week after Mr. Vanderbilt had been offered \$100,000 for the mare. Using his own language, he sold her to Mr. Bonner because he knew that she would not be raced. Mr. Vanderbilt had suffered much annoyance from the gamblers and speculators of the turf, and the \$100,000 offered was with the condition that the sale be not made public for a stated period, the idea, no doubt, being to race her, using Mr. Vanderbilt's name as a guarantee of honor where no honor existed.



Sheppard F. Knapp driving Charlie Hogan and Sam Hill.
From a Painting by McAuliffe, loaned by Mrs. Sheppard Knapp.

David Bonner told me the story of the purchase as follows: "Quite early one morning, Mr. William Turnbull, a close friend of Mr. Vanderbilt, came to the *Ledger* office, and, after the usual greetings, he asked me bluntly if I thought Robert would entertain a proposition to buy Maud S. I tried to retain my composure as I replied that I was unable to say, but Robert was in his office and wouldn't he go in and see him? He said he was not authorized to see him unless he knew in advance that Robert would entertain a proposal. After talking a few moments, I stepped to Robert's door and said: 'Robert, Mr. Turnbull is in my office.' He asked to have him sent right in. They probably talked for an hour, and as Mr. Turnbull passed me in going out, he said: 'I shall probably see you to-morrow.' A few moments later Robert came out and asked me why I had not told him when I announced Mr. Turnbull's presence that he had come to offer Maud S. My reply was that I had nearly fainted when I learned the object of his visit, and I wanted to see what effect it would have on him. The next day I went to Saratoga, and on talking with Mr. Vanderbilt found there was a little misunderstanding regarding the price. As a result, we sat up until eleven o'clock, discussing the matter, there being present Mr. Turnbull, Joseph Harker, and Phillip Harbeck, besides Mr. Vanderbilt and myself. When I returned the next day, the mare was the property of my



John Shepard driving Mill Boy and Blondine.
From a Painting loaned by the Owner.



The old McComb's Dam Bridge.
From a Painting made in 1790, loaned by Gabe Case.

brother. And now Maud S. rests by the side of that other great champion, Dexter, at East View, N. Y., and a monument appropriately inscribed will be erected to her memory."

While New York was the fountain head of road-driving, and constantly the home of the greatest trotters in the world, Boston became quite prominent along in the sixties. Mr. John Shepard was then and is now the leader of the select coterie of gentlemen drivers. In 1881 he drove Mill Boy and Blondine to a world's team record of 2:23 over old Beacon Park track, Boston. The track was concededly two or three seconds slow. Mr. Shepard tells me that he could have easily driven the team in 2:20. Frank Work soon after drove his team, Dick Swiveler and Edward, in 2:16¾, and Mr. Shepard knew he could not reach those figures. Mr. Shepard sold Swiveler to Mr. Work. Mr. Shepard once said to me: "I have owned a number of good horses, and some better than those I have mentioned, but I never had a team that could beat the record made by Mr. Wm. H. Vanderbilt with Maud S. and Aldine—2:15½—therefore, I have never tried. I sold Aldine to Mr. Vanderbilt for \$15,000, and he told me afterward that he had never owned a pair that gave him so much pleasure as Maud S. and Aldine. If I

can mate Senator L., I expect to beat all team records this summer."

The citizens of Brooklyn followed the metropolitan lead, too, and there road-driving and racing became popular. The Parkway Driving Club, of Brooklyn, was organized in 1885, and from its inception has been prosperous. Its membership is composed of some of the best-known financiers and public men of that city, including Messrs. Frank D. Creamer, E. T. Bedford, John F. Dingee, Senator John McCarthy, F. G. Lemmermann, and John H. Shults. In addition to the beautiful half-mile track and clubhouse at Gravesend, the members of the Parkway Club and other Brooklyn road drivers enjoy speeding their horses on that grand driveway, the Ocean Boulevard, extending from Prospect Park to Coney Island.

In the early seventies Philadelphia gentlemen organized the Belmont Driving Club. To-day it is one of the best-known pleasure organizations in the country. It owns a mile track and handsome club-house at Belmont Park, and its *matinée* races, which take place almost every week during the spring, summer and autumn, are very popular, and among the most prominent of the entire country.

The ravages of the building speculator, or rather the needs of the mighty

Babylon which enterprise has built on and around Manhattan, seemed determined to leave no appropriate place for the hoof of the gentleman's trotter ; and during the administration of Hon. Hugh J. Grant as mayor, the first concerted and determined effort was made by New York road drivers for a municipal speedway. It was not, however, until the administration of Mayor Gilroy that a bill authorizing its construction was introduced and passed by the Legislature. The work was completed, and the magnificent driveway along the western bank of the Harlem River from One Hundred and Fifty-fifth street to Fort George thrown open to the public. It is a subject which tempts my pen to linger, but it is a chapter too modern and really too large for this occasion. There are now speedways in almost every city, but for length, beauty of scenery, picturesqueness, solidity and elasticity of roadbed, none can compare with the one enjoyed by New York road drivers.

Since the days of that little gray mare, Lady Suffolk, whose history will always awaken interest among admirers of light harness horses, there have come many improvements in tracks, sulkies and harness. The old-style sulky of 1835 weighed fully one hundred and fifty pounds and frequently more. The one of to-day weighs from twenty-five to thirty-five pounds, and the present speeding wagon, with four wheels, weighs only from fifty to seventy-five pounds.

To a reduction of weight must be added the advent of the rubber-tired wheel

as a material factor in reducing the time. When Lady Suffolk made her record of 2:29½, in 1845, over the old Beacon course, she trotted over a track not only wavy, but actually hilly, with parts of it hoof-deep with sand, and other parts as hard as adamant. The public track of to-day is like a billiard table in smoothness, and work is continued upon it day after day for the entire season to keep it elastic and yet solid, so that it will not "cup out" under a horse's feet.

Out of the persistency with which the amateur, from 1835 on to the time of Mr. Bonner, insisted upon maintaining road-driving upon the highest possible plane, has grown the vast array of gentlemen's amateur driving clubs now established in almost every city from Portland, Maine, to San Francisco, California.

The idea of a strictly amateur club, organized for the purpose of *matinée* racing among members, is of recent origin. The first two or three clubs established on purely amateur lines failed to be successful, but they were followed by others which profited by the errors of the earlier ones, and to-day *matinée* clubs exist and prosper in a great many cities. The reasons for the remarkable growth of this distinctly American sport are many. Above all, however, it is clean, manly and healthful. It is exciting and furnishes invigorating exercise, while it possesses enough of the element of uncertainty to make it especially alluring. It is a sport in which will, energy, brain force, and quick perception play prominent parts, and it therefore appeals to the American.



The old Fleetwood Track.
From a Photo made in 1898.

THE LAYING OUT AND CARE OF A GOLF COURSE.

By Willie Tucker.

PERMANENT OCCUPANCY.

THE fundamental essential in laying out a golf course so that it will give the most enduring results, both as a links and as an investment, is the securing by purchase or long lease of a tract of land suitable for the purpose. In what that suitability



Two Stone Walls and a Road.
A Natural Hazard at Westchester Golf Club.

consists I will say more presently; but, no matter where the site is, unless you have certainty of long possession on your side, you will be tempted to adopt half measures in treatment, or have to surrender the most important of your results.

In the upbuilding of a golf course time does the work more effectually than a large expenditure of money. Economy and prudence, therefore, both exclude from consideration any district or situation in which fixity of tenure cannot be assured, no matter what other advantages that situation may possess.

I know two courses near New York, for instance, and very good courses they have been made at a large expenditure of money, thought, and labor; either or both of them may, at any month, have to be vacated, and with that event down goes the whole sum invested on them, and down goes the value of the adjacent club-house by leaps and bounds. The investors and the game both suffer.

Of course these observations are directed to the establishment of a *bona fide* course to meet a permanent local want and to give the investors as well

as the players satisfaction. They are not made for those whose ideas of golf are satisfied with nine teeing grounds about eight feet square, as hard as a road, nine holes in the ground, and nine flags.

The next essential is to seek the advice of a thoroughly experienced designer of golf courses, and let him tramp over every district within the possible radius for general selection. Only one point would I insist on in this preliminary walk over, and that is that he be accompanied by some one who knows what the sub-strata are, and what conditions prevail at different seasons of the year. Things are not always what they seem on a fair summer's day. I have known floods to come and wash away three seasons' work, where a little local foreknowledge would have discovered this possibility and avoided the district.

The ideal links sites are those that can be secured on the sea-shore, where the sand is fine and has been blown into more or less irregularities, where time has bound it into stability, and long pasturing produced stretches of fairly good grass. Such a course is Shinnecock, L. I.

But all cannot be next the sea, and for inland courses select a line of old pasture fields lying in the winding valleys of low hills, so that, if hills must be taken, you can pass over their toes and not their crests. Avoid precipitous or rock-strewn hills and heavy timber, or even scattered timber if it be dotted too freely.

LAYING OUT THE COURSE.

When a site has been selected, have an exact survey and plat made, and get the isometric lines from the Government survey. They give the actual height above datum of every foot of your ground, and it is surprising how different from appearances facts sometimes turn out: a gradual incline that looks to be only fifteen feet high may be forty-five, and a bluff that looks sixty may not be half that high. Facts are stubborn things, yet nothing but facts

can be reckoned with. Especially are those lines useful when the question of artificial drainage arises and natural water-sheds must be followed.

Now you are ready to consider how to use to the best advantage your tract, and, of course, any skilled designer will be able to submit plans in detail. They will, of course, take advantage of everything nature has done, or man has added to it. Every watercourse must be considered in all its windings and possibilities, every stone wall and road in its relation to the whole scheme, every sand, pit, quarry, and rock, every valley and undulation, and even the trees have to be brought into account as to how far they will help or obstruct the game. All these features can be made to assist in economizing expenditure; a natural hazard is as good as a made one, and it certainly is cheaper.

With these general observations I can now, perhaps, to advantage point out some details that will be of use to those, and they are the majority, who, though having little or no practical knowledge, are called upon to authorize outlay.

In laying out a course the principal point to consider is what kind of players it is for? If for a club in which the majority of players are thoroughly expert, the distances between the tee and green may be often quite long, but if the club is mainly of novices then the distances must be short and the whole course made easy. There is little or no disadvantage in beginning with moderate lengths. It is easy to make a course difficult at any later time.

Golf is comparatively in its infancy in America, and time will gradually develop it, but for the average American golfer of the present day, and for the next five years, I think a bunker 135 to 140 yards' carry is quite sufficient. After that time the younger element will be coming right along, and it may be practicable to extend the carries to 160 yards.

It is always best to have the first tee located as near the club-house as is convenient, and to make your course a straightaway one. Upon no consideration cross the line of one play with another, if it is possible to prevent it. All courses where players cross each other are a source of annoyance and very dangerous.

If in laying out your course consider-

able lengths are sometimes absolutely unavoidable, and there are no ponds or long grass or bad lies, and where a player who tops his ball is not penalized, then put a sand bunker or pit 135 yards from the tee, so as to catch a half-topped drive. Also put a sand-pit or bunker as near the green as possible.

If the hole is 210 yards from the tees, put your bunker from twenty to twenty-five yards short of the green, according to whether your ground is dead or fast. The player who drives 160 yards is near enough to pitch his mashie shot up and stay on the green in two; while the player who misses his tee shot is left to choose his fate, either to play short in his second, not caring to run the risk of getting bunkered, or otherwise to take his brasseys and go for it. In the majority of cases: he will press half-top or scuff, getting either bunkered or short, requiring three to get on the green. Should he get his ball clean enough on his second to carry the bunkers guarding the green, under ordinary conditions he would probably be twenty yards too far, making it a five-hole, while the best-played ball gets out in four.

The best course is where the holes run at these distances, 175 to 185 yards, 320 to 330 yards, 465 to 475 yards. If you have the opportunity of making a short sporty hole of 80 to 100 yards, with water or bunkers protecting the green,



A Water Hazard at Meadowbrook.

making the player pitch his shot on the green to stay there, it adds interest to the course.

These distances are most suitable for the majority of the club members, although there are exceptions, and every club has one or two extraordinary long drivers; but to make the course suitable to their play means disaster to the majority.

Referring to distances reminds me

of an article in a New York paper in which it quotes the wizard (Vardon), stating that a first-class course should have its bunkers 150 to 160 yards from the tee. I quite agree with him for a championship course, but at that distance ten out of every twelve would to-day find the bunker, and ordinary players get disgusted at being bunkered off a beautiful drive.

THE PUTTING-GREENS.

The next important step is putting-greens. Pick out nice, natural, smooth, undulating pieces of ground, about seventy-five feet square, or oval for preference, as being more catchy and novel. Where the turf is good but rough do not disturb it by taking the sod off and making it level, on the tennis-court order. By that you spoil the features of a putting-green, but if the ground is cuppy, and shows bare patches where there is no grass, cut the bare spots out and take the soil away three inches deep and patch with fresh soil and good turf.

If your green is bare, and grass does not grow very strong, as is often the case in clay soils, get an eight-pronged coke fork with teeth about one inch apart, dig the teeth in the green about two inches deep, pull the handle toward you, raising the ground up about one inch high above its level, and follow three inches behind with your fork, so when you have finished forking your green it will leave the holes open for ventilation to the roots of the grass.

After you have done that, give it twenty-five pounds of ground bones, and sow one peck of each seed as follows, mixing thoroughly: Rhode Island bent, Kentucky blue-grass, creeping bent, and crested dog-tail. Scratch your ground with a fine-tooth rake the same way you fork, spread one load of good coarse sand and loam, cross-rake it, and

then put a light hand-roller on, which will give you a good level surface.

For clay soils there is nothing better than to top-dress it in spring and autumn with good sharp sand. If the spots selected for the putting-greens are rough, and require to be graded, cut out all the turf worth saving, and plough into the ground a liberal quantity of old, well-rotted stable manure, grade up, cross-harrow or rake your ground thoroughly, and let it lie a week or so to settle. By that time you will see where you will have to fill in.

When graded put a hand-roller over it and level the surface, rake it again, and lay your turf. When you have finished laying your sod, roll well, top-dress with light loam or sand sufficient to nearly cover the grass, rake or brush lightly by dragging a cedar brush, so as to fill in the seams of the sod and to protect it until it takes root.

After a good rain your soil will disappear. When it is dry enough, so that the roller will not pick up the soil, get the heaviest hand-roller you have, and roll both ways.

After laying the green it is necessary to keep from playing on it for at least two months, giving it the chance to set together and root, without being disturbed. Keep the grass cut not too short, and roll well.

If you have difficulty in procuring good turf I recommend the setting down of a turf nursery of about one or two acres. For this select the best waste ground (neither low nor swampy), plough deep and thoroughly into it well-rotted stable manure, and cross-plough it in lightly every month until September 1st. By that time the soil will be light and sweet. If it is clay soil rough-harrow it first and spread twenty-five loads of clean sand to the acre; cross-harrow thoroughly, so that the soil is pulverized and thoroughly mixed; roll lightly; sow about seven bushels to the acre, of Rhode Island bent, creeping bent, red top, crested dog-tail, and Kentucky blue-grass, and mix thoroughly; cross rake or harrow in the seed, then roll lightly. In two years you will have a perfect piece of turf to draw from to do the patching of greens and tees. If you sow in hot weather, sow with oats, for that will protect the young grass from the sun.

The best time to put your nursery



Artificial Mound Hazard at Nassau.

down is the autumn, as you will not only get your seed up strong before the frost sets in, but it will be hardy and produce a rapid and thick growth in the spring.

CRAB-GRASS.

One of the greatest difficulties with which the green-keeper has to contend is the monopolizing and invasion of crab-grass on the putting-greens, which generally starts growing about June. When first seen it should be given immediate attention and taken out. If neglected, it will take possession of the putting-green.

Whenever the other grass is not strong enough to resist its growth, and when once thoroughly established, crab-grass is very expensive and difficult to exterminate.

Crab-grass will grow only in dry and hot weather and when exposed to the sun, or whenever the ordinary grass will let it. It seems to thrive on gravel and clay soils in particular.

In top-dressing your greens for the winter do not put any stable manure on unless it is two or three years old and well rotted, for green manure will be a hot-bed for crab-grass, chick, and many other weeds, and will ensure the appearing of crab-grass a month earlier than is usual, not giving the ordinary grass time enough to thicken and choke it out. Road scrapings should be avoided: they are nothing but a harbor for all kinds of weeds.

The only way to keep out crab-grass is to get a thick and matted turf on your greens as early as possible in the spring. Keep it rolled and cut close until about the end of May. During the months of June, July, and August, let your knives of the mower up, so as not to cut close.

If any crab appears take it out, also the soil where it has taken possession; replace with light loam, and sow thickly with seed; or cut out the bare spots with the hole-cutter and replace with good turf; the latter way for preference, as it does away with the bare spots quickly, and is more reliable.

If the crab-grass gets beyond your control and is let to go the season, the best thing will be to expose your putting-greens to the winter long enough for the ground to freeze two or three times; when it thaws you will find the roots heaved up, and they can be

easily raked or picked out clean. Of course this will leave bare patches.

Start as early as possible in the spring and patch with good turf. If speckled all over it will be necessary to rake up the ground well and give it a heavy



A Natural Sand Bunker at Maidstone.

seeding and fertilizing, and top-dress with light soil.

Through the course is the most difficult to get good grass. From its extent it cannot have the same amount of care, expense, or attention that is bestowed on the putting-greens. If you find bare ground where grass will not take well, get a fine-tooth harrow with two-inch tracks, fertilize with bone, harrow twice the same way; sow four bushels to the acre or in proportion, but mix thoroughly, one bushel Kentucky blue-grass, one red-top, one Rhode Island bent, one red fescue. These grasses seem to be adapted to, and do well on any kind of soil.

The fescue does exceedingly well and forms a deep root, and is best to sow on dry gravel banks or side-hills where it is clay and stony. Once established it is not so liable to waste or die out as other grasses would under such conditions.

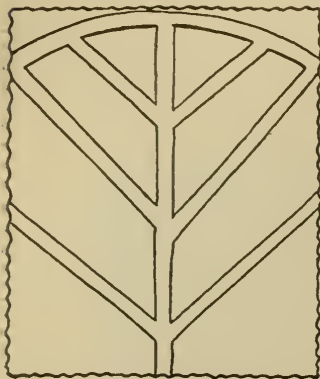
If you find moss growing it is a certain sign of poverty, bad drainage, and sourness, and the course, or at least the greens, should, if possible, be drained; otherwise top-dress with four barrels of lime slacked to every hundred yards square. The lime will sweeten the ground and promote a quick growth. Many grasses do better on it than on fertilizers.

DRAINING.

If you intend draining, which is the cheapest and surest method in the end, take advantage of the natural fall of

the ground and start your trench fifteen inches deep, following your fall, and allow nine inches fall in a green of sixty feet square.

One often hears of blind ditches and drains. In the majority of cases they are made of fence-rails, formed like a water-trough, or large stones are put in on the same principle, on top of these cedar brush. Then the drain is filled in with earth.



The Drains under a Putting-green.

That kind of a drain may do for farmers, but for a putting-green I strongly condemn it, for these reasons: The wood trough, after a year or so in the ground, will rot, and there is not enough suction on either side to allow the drain

to draw. The only water it can take is the surface water lying directly over the drain. In one year the cedar brush will begin to rot. The drain will continually be sinking, and be a nuisance and disfigurement to your putting-greens.

The best and only drain for a putting-green is a herring-bone drain of tiles. Start your trench twelve inches wide, fifteen inches deep, getting the required fall. Lay in the centre of your trench 3-inch unglazed pipes twelve inches long; lay them about one-half inch apart and fill in with nine inches deep of broken stone, brick rubbish, or clinkers, about the size of an egg. Tread these down as tight as you can get them, fill in with earth and ram down firm.

This will give a permanent drain which cannot get choked, and within three months you can scarcely see where the drain was made. By this kind of draining each rib will draw the water from twelve feet of ground and make a quick and firm green after the severest of rain-storms.

TWENTY-FOUR HOURS IN THE ROPES.

AN ASCENT OF THE MATTERHORN.

By Charles W. Hodell.

FOR years I had heard of the difficulties of snow-climbing, and I was not unacquainted with tales of Alpine disaster. I had turned from the stories of one successful climber after another with emphatic and uncomplimentary opinions. And as taking unnecessary risks had never afforded me pleasure, I felt myself quite proof against that especial foolhardiness—danger for the mere excitement of it. But I had never then breathed the air of Zermatt.

Fully three days had been spent in the usual excursions from that lofty valley before I became conscious of the growing fascination of the mountains. The first day I climbed to the Gornergrat, and there I began to realize the glory of the snow-peaks—Monte Rosa, Lyskamm, Castor and Pollux, and Breithorn pouring their burdens of snow into the glacier at my feet—a wondrous brotherhood, gleaming and radiant, a dream world with wall and battlement and dome of ice and snow.

There for the first time I had entered the silent company of the higher Alps. Many years before I had been happy in the fresh greenery of the Lauterbrunnen Valley; had stood on the Wengern Alp to watch the course of the avalanche; had been carried away by the ecstasies of a schoolboy in the flower-strewn meadows of the upper valleys. But now I experienced a new mountain-born passion, an awe of those great, silent peaks and a desire to be near them.

Next day we ascended the Hornli. For hours during the climb, the tremendous pyramid of the Matterhorn lay before and above us. The individuality of the peak grew more and more impressive as we drew near, and even when we reached our highest point, almost ten thousand feet above the level of the sea, it still towered tremendously above us, its every line a defiance. From the summit, cloudbanks streamed away on a strong east wind, or settled and shrouded it. But I could still study the

marvellousness of it all, passively, for my ear had not yet caught the siren note. Near by, after a perilous scramble, above the Furggen Glacier, I gathered my first edelweiss. It had been a glorious day, and before night fell the vast snow-fields had laid their spell on me. The fever for the mountain was kindled, and I determined to make the ascent of the great Matterhorn. My guides, Alvie Lerjen and Gabriel Tangwalder, met me at two o'clock next day, and after a leisurely climb of several hours we were well out of the valley.

The sun was still an hour high when we set our faces toward the mountain and a thousand feet of scrambling brought us to the crest of the Hornli, its narrow back-bone flanked by precipitous and snow-clad slopes affording us a path. Yet there was so little difficulty in what had appeared difficult from a distance, I began congratulating myself that the ascent was not after all going to be as hard as it had been represented.

Then came the sunset. Only those who have seen the evening among the higher mountains can imagine the glory of that hour. Changing hues and fading lights lay on the limitless snows. The white ramparts of the Matterhorn Glacier gleamed between us and the Grandes Dentes, where the sun was sinking behind the barrier of peaks. Shadows crept slowly up the mountainsides, and the lower valleys faded into gloom. Yet far above us the summits burned radiantly; the Weisshorn, the Rothhorn, the Michabel group, the colossal chain of Monte Rosa, were all transformed with a new beauty—the utter quiet and peace of evening over all.

Twilight was far gone when we reached the Matterhorn hut, the work of the Swiss Alpine Club, a small stone cabin, roofed with flags, standing among the snow and rocks of that barren ridge, seemingly native to the place. Its narrow hospitality was soon ours, with a cordial welcome from a few of the members of the club who were passing the night there.

Bundled into heavy blankets on the damp straw of the bunks I could not sleep. My mind was too much filled with the morrow, and the hours dragged silently, except for the crackling of the frost and the heavy breathing of the others. It was a relief when Gabriel

arose to take a look outside. His report was favorable, and we were quickly astir.

At five minutes before two, we roped in before the hut. The moon had gone down, but the stars twinkled brilliantly. Glaciers stretched darkly below us, and the higher mountains towered in dim outline against a steel-gray sky. Immediately before us rose the Matterhorn, its dark lines lost among the stars.

Not a breath of wind was stirring, and the snow crunched beneath our feet as we pursued our course steadily by the feeble light of a lantern along the ridge to the very base of the pyramid itself, where four thousand feet lay between us and the summit.

We turned the eastern slope, on a narrow shelf along a cliff, overhung above, and an unknown depth below. It was seldom two feet broad, and often shrunk to inches, while an occasional projecting rock seemed to deny possibility of advance. Within a few minutes my thought of an easy ascent had vanished. Yet we made steady and rapid progress.

Then came the first couloir and the first serious climbing. A narrow strip of snow lay across our path. The rocks rose dimly on the other side, not more than fifty feet away, and I expected to see our leader move quickly across to them. Yet those fifty feet cost us half an hour. We were near the head of the couloir, and the drippings from the cliffs above in the warm morning hours had glazed the slope with ice. So each step had to be cut, and the fragments of ice as they were dislodged went whisking toward the glacier two thousand feet



The Matterhorn from the Staffels Alp.



Scaling the Face of the Upper Matterhorn.

below. A second couloir and then a third followed. The steep slope of the last, for five hundred feet, gave our step-cutter an hour of unceasing work, and then a scramble along half-inch fissures brought us back to the rock again.

Dawn was coming, and we could now put away the lantern. First the peaks glimmered a faint silvery light, a magic light which seemed to touch their dead unmingled shadows into the life of a new day. The east was slowly brightening, and the dim outlines of the nearer glaciers grew clear in the depths below us. Rocks and patches of snow became more distinct, and we could see something more of the slope than the immediate foothold on which we stood. Then the silver slowly gleamed and brightened, until Monte Rosa caught the first direct ray of the sun, and the silver was transmuted into gold. Peak after peak received its halo until the whole range, far as the eye could reach, was glorified.

Our path lay straight up the eastern face of the mountain near the northern edge. But, properly speaking, there was no path, only ledge above ledge of a gigantic stairway. In the easier slopes loose rocks were piled treacherously on one another, and we made our way by jagged fissures carved by frosts. It was stiff climbing, but not very dangerous work, as even an inch of foothold on a jagged rock or a hand-hold on some slight projection is enough to give the climber considerable feeling of security.

Occasionally the rock presented a disagreeably smooth stretch to some good ledge above. But the guides would find means of ascent, and then by dint of a good pull on the rope from above, and considerable scrambling with hands and feet on my part, I would find myself past the difficulty. There was zest in the overcoming; and in secluded nooks, even at an altitude of thirteen thousand feet, my attention was often arrested and my nerves soothed by the sight of two little mountain flowers, fragile mites, anchored, as it were, in the skies.

At length our path took us to the very edge of this northeast ridge, and the whole panorama to the north burst on our view. Far below us lay the great white masses of the Matterhorn Glacier, with snowy ramparts three hundred feet high. Still farther down in the valley lay the Zermatt Glacier, covered with debris in its lower parts, but whitening toward its source in the spotless snows of the highest mountains. It was one of those surprising panoramas which are among the chief rewards of the high mountain climber.

In spite of what seemed very slow work, we were really under the Shoulder by seven o'clock. The guides found a slight ledge, and began to breakfast very deliberately. But I was impatient to push on and finish the morning's task, for the Shoulder had seemed quite near the summit, when I had looked up from the valley below. They gave little heed to my impatience, however, and shook their heads in a non-committal manner when I asked if we could not reach the summit in an hour.

At last we again moved on. Immediately above us stretched the Shoulder, a snow-field of a few acres, clinging to the mountain, at the angle of a steep house-roof. Scarcely a rock broke its smooth, glaring surface. Our direction was given by occasional iron stakes, but the ropes from them were buried beneath the snow. The results of yesterday's storm, two inches of sleet, with half a foot of light loose snow, gave a most precarious footing on such a slope. So into the ice below, each step had to be cut, and cut the more securely as our ice-picks could take no hold on either ice or snow. We could trust only to our hobnails and the steadiness of our guides. Occasionally the footing became so uncertain that we stooped to

cling to the ice with our bare hands. Though the leader of the party worked busily, it was often several minutes between steps. The sun, too, glared down with merciless brightness but insufficient heat. A sharp north wind began to reach us around the edge of the slope. The footing was seldom secure enough to allow us to swing our arms and keep our blood moving, and exposure was rapidly becoming one of the chief elements in the peril.

An hour passed, and the progress was discouragingly small; two hours, and there was considerable before us still, and not till eleven o'clock did we reach comparative security in the jagged rocks on the crest of the Shoulder.

A hope-begetting ignorance is the panacea of the greenhorn. The cliff before us was, indeed, threatening, but the remaining stretch to the summit had seemed so very short when seen from the valley. Though we could not now see the summit, we could tell where it was by the puffs of snow which were occasionally swept off by the wind.

The ridge of the Shoulder which we now ascended offered but a hand's-breadth. On the right, a precipice fell off almost sheer to the Matterhorn Glacier 5,000 feet below. On the left the treacherously smooth incline threatened a glissade to the Furglen Glacier. We used the very gable edge. Two of our party stood as firmly as possible, while the third crept cautiously along, sometimes on all fours. For a moment a bit of rock would offer secure footing; then a dozen steps would have to be cut across a glare of ice.

At the foot of the upper pyramid, with a thousand feet still to climb, the steepness of the pitch increased, and, steep as it was, the snow and sleet of the day before, driven by a high wind, had glazed it all. Ledges dwindled to mere inches, and the only foothold was in slight fissures, sometimes in absolutely perpendicular rocks. We often stood on one foot for lack of a place to set the other. Yet Gabriel would advance incredibly, while I clung precariously to my slight hold, at times not daring to put an ounce of weight on him. Finally, at times, we seemed to have reached the limit of possible progress, but while we waited breathlessly one of the guides would advance with excessive caution until he could let down a light rope from

some point of comparative security above.

With all this, the mountain could not have been ours without the permanent ropes and chains which hung over the worst portions. Sometimes they were frozen in the ice, and they were usually too weather-beaten to give one entire confidence, so each piece was first tested vigorously. In places, however, where the rock rose sheer for fifteen or twenty feet, there was nothing to do but throw one's weight on the rope and walk up the perpendicular face.

Sometimes the foothold would give way and throw all the weight on the rope; sometimes a hand was released to lay hold of a promising jut in the ice-covered ledges; and so scrambling, swinging, and tugging, up we climbed, rope after rope, for three hours. I wondered what could prove impossible to these guides when they determined to advance.

At length the ascent eased off. The guides assured us that the summit was not far ahead, and we were soon striding rapidly up the last few hundred feet over an easy snow-slope. At two o'clock the mountain was ours. We had met the challenge and conquered!

The summit is a waving snow-ridge several hundred feet long. On the very



Crossing the Shoulder.

verge, overhanging the Italian frontier, the winds had built a snow cornice. Beneath this we could see an ice-hung ledge, the brink of the cliff, three thousand feet sheer toward Italy. On all other sides the slopes fell away so rapidly as to make our little foothold seem like an island of snow hung in air.

For a hundred miles in every direction the country lay before us. Glaciers and grassy slopes alike spread level to the eye as a carpet. Mountains had dwindled into foothills, and we could look down on all but the highest peaks. We were lifted into the company of the loftiest Alps, and they only maintained their individual importance in the view—the rounded dome of Monte Rosa, the triple horns of the Michabel, the sharp gleaming pyramid of the Weisshorn. Down along the narrow cleft of the Visp was ranged a wilderness of mountains and glaciers. In the rifts between the peaks could be seen the Rhone valley, blue in the distance, far away toward Lake Geneva. Farther to the right lay the Bernese Oberland, a whitened chain of toy mountains, dwindling into insignificance in the distance; and from the slopes of the Jungfrau swept the Eggishorn Glacier, the largest glacier in Europe, but covering only a hand's-breadth to us. To the south was Italy, its nearer mountain valleys and minor peaks clearly defined, while the plains of Lombardy were gradually lost in the haze, a purple sea, stretched far and wide.

To the west, Mont Blanc thrust its broad shoulders high above its neighbors, though even it seemed small. To its left in insignificance were Monte Viso and the Maritime Alps, one hundred miles away. It seemed almost possible in imagination to make out the Mediterranean. A world of ice wherever the eye could rest; no life, no sign of human habitation, only the mighty chisellings of the elements. Millions of people in France, Italy, and Switzerland within the range of vision, and yet nothing to be seen but the inanimate handiwork of God. One was lifted to a new point of view with regard to this world of ours. How the globe itself must lie as a grain of sand in the palm of the Almighty when man loses the view of even his own work so quickly!

It was soon high time for us to begin

our descent. The same phantom hope that most of the difficulty was now past, again stood me in good stead. There were a few more hours of daylight, and that seemed enough for us to get back to the Schwarzsee Hotel by nightfall. But when we had fairly set ourselves to swinging down the ropes, I soon discovered my mistake.

Little snow had to be cleared away, indeed, but the caution must be increased, and every step became a study. Hand under hand we slid down rope after rope until all strength was gone from my grip. In the worst places, Gabriel had to let me down bodily over the perpendicular rocks, and I took consolation in the strength and newness of our rope. For a time I would dangle helplessly in the air, and then my feet would be placed in some unseen crevice. This sliding down a place so steep as to prevent one seeing one's foothold below, takes all one's nerve. There was little assurance whether the hold was on a loose fragment, slightly frozen into its place, or on a firm ledge.

With the falling of night, the air was becoming chillier, and the fear of being benighted on the mountain kept getting stronger and stronger. The sun was not an hour high when we crossed the Shoulder and passed down its perilous ridge and glassy slide and began to descend again. We had long before given up the thought of returning to the hotel that night, and even the hut seemed far away. Twilight remained with us till nine, but it was gone before we reached the upper hut, after some frightful scrambling over the darkening ledges.

This hut stands on a narrow platform built up against the cliff, at an altitude of more than twelve thousand feet. It was abandoned years ago, and was banked full of snow. So we could find no comfort there. We hardly knew what to do. My companion was too exhausted to proceed, and I was too thinly clad to continue the exposure to the bitter cold throughout the long night. I was angry, too, with my guides, whose delays against my protests had kept us out thus. The weather had been clear all day, but heavy clouds were beginning to roll up, and I feared a storm; and a storm there would mean sure death to us.

For a while we lost our way and had to descend as we could. At times we

would come to the very brink of a precipice which would make necessary a careful detour. Working along thus around one difficulty after another, it seemed not improbable that we should at last come where all further progress would be barred, and we should be compelled to stand on some small ledge till daylight. Once my ice-axe tripped me in a precarious place, and I pitched headlong. I fell scarcely two feet before the rope checked me up, but there was time for the thought to flash whether Gabriel was ready for such a pull. No comment was made but a significant grunt, and we proceeded in silence. About midnight we reached the head of the couloir.

We stood huddled together for a few minutes in uncertainty. There was not sufficient room for any of us to stand erect. The rock descended straight for twenty feet to the couloir, and it was perhaps the same distance round the rock horizontally to the snow down which our further path lay. The guides disagreed as to whether the attempt should be made or we should remain there till morning. I had become indifferent between two apparently desperate alternatives. But finally Lerjen began the advance while his companion held the rope, bracing himself as best

he could. I knew very well what a slip would mean. Lerjen flattened himself against the perpendicular rock, feeling for slight crevices. There was scarcely a break above to give handhold. Once for several minutes together he had to cling helplessly, unable to advance or retreat until some chance-found hold gave an ounce of additional security. Perhaps twenty minutes passed before he stepped down on the snow. He cut a foothold, tightened the rope, and called for me to follow. How I advanced along that rock still remains a mystery to me, though I was supported by the tautened rope. But at last Lerjen could reach my feet to thrust them into the proper crevices, and I was soon beside him. Fully three-quarters of an hour was spent in passing those twenty feet.

But we were not yet out of danger. The couloir still lay below us. Its snows had been greatly softened by the sun, and it was impossible to get a secure footing, while there was always danger lest the whole surface would slide away in avalanche with us to the glacier. Our case never at any time to me seemed more desperate, perhaps because my grit was waning. I planted my ice-axe deep at every step, and felt comfort in the tug of the rope around my waist as Gabriel slowly paid it out to me in my descent. The patience and constant alertness of these guides are a tonic to the nerves of the wearied tenderfoot.

For a time we had the lantern to direct our steps, but the candle slipped out and went rolling away. Clouds bore down on us and enveloped us, and we could see but a few feet around. Of all the hard experiences of the day, this seemed the most unending. There was terror in the vague mountain mass above, and in the cloud-filled abyss below. The only sounds that broke the silence were the words for advance or halt.

Finally, a swing round to the left brought us to a good platform of rock, and my guides sat down dejectedly to wait till morning. But here a rescue party met us, and with their help we pushed on to the hut, though my guides refused, tired as they were, to surrender their places at the ends of the rope.

At thirty-five minutes past two we leaned our axes against the hut. We had been in the ropes for twenty-four hours and forty minutes, a long test.



At the Summit.

EDUCATING THE POLO PONY.

By Owen Wister.

WE must remain uncertain whether the polo pony moralizes upon the variableness of life or takes his destiny and his meals unthinkingly. No other animal meets with more chances, or treads wider ground for reflection. Not another of the creatures fallen into the domesticating company of man ends further from his beginnings. In unroofed, unlimited Texas, houseless, unfed, ungroomed, with a long mane and a flowing tail, he is suddenly picked and promoted from the ranks, given corn and bran and sugar-cane, educated like a specialist, and watched like an heir apparent. Presently he enters Newport,



The Educator.

roached and docked, to live in a stable, and manœuvre in the eye of fashion, having ascended through the steepest contrasts of experience. Very few of the families that buy him have seen themselves rise more abruptly.

It would embarrass him to find you his parents. Yet they, likely enough, are still running about as usual in happy Texas, with a long mane and a flowing tail, unconscious of the progress of their child, and begetting younger brothers to follow in his steps. Possibly the only thing he finds at Newport to remind him of his old cow-punching days is the language spoken by his riders upon occasions during their game.

For it is upon somebody's ranch that he made his beginning—let us say in McCulloch County, or San Saba. If he has seen fences they have been of

barbed wire, and somewhat longer than the fences in Rhode Island. There is a certain fenced pasture in McCulloch County called the "small pasture." It is nine miles square. If he has seen grass—but the notion is preposterous. Go yourself and look at McCulloch County or San Saba. You will see a world as bald as the moon, stretching naked to the Pacific. This world has the skin on in Texas; when it gets to Arizona it has only bones. Or you will see, southward and eastward, perhaps, a thick, gray thatched hairy hide of thorns clothing the world; they are knee-deep and wicked; and if a pony chewed them, glass bottles would be good enough for him in Newport, and make him fat. Then there are cactus and the smoke-weed. Also, here and there, you will come upon miles of apparent orchards and a rural neighborhood, so evenly do the trees seem planted, and so much do they resemble peach and apple trees. But the apple are only live-oak; the peach are only mesquite; there is no rural neighborhood; and the orchard wall and the white steeple that you cannot help expecting just over the next hill, never turn up. You may see a wolf, and beyond him the rest of Texas.

This is the world as the polo pony has known it before civilization laid its selecting hand upon him. And what he would call grass is a flickering ghostly yellow appearance, which an Eastern horse could not detect with the naked eye. Then comes his day. Perhaps he has been the sole possession of a cow-puncher, who parts with him for double or treble the price that he paid. A few years ago that would be, say, thirty dollars, or even forty, if the pony were of great promise. But polo has grown a sport so active (and certainly it is the very emperor of games!) that even in distant Texas must civilization get up earlier in the morning and hunt farther afield for the raw material from which it is to manufacture the ultimate Newport standard article.

The call for ponies in the East has come to be heard widely in the West, and the cow-puncher who would part with his little horse for thirty dollars

(and often much less) seven or eight years ago will not do so to-day. The industry has become recognized. It has been rumored that a certain pony which so-and-so sold to what's-his-name for twenty-five dollars in San Saba was taken to Dedham, or Radnor, or Ipswich, or Woodsburg, and sold for six hundred. The improvements that were built by the middleman upon the pony between these two transactions are not taken wholly into account by the Texas mind; therefore, does the raw material come higher to-day.

But in 1893 the middleman did not have either to pay so much or to cover so many hundreds of miles to procure the horses that he needed. The gathering was done nearer his headquarters, nearer the home pasture, and the training-ground, and the feeding corral. Sometimes a pony would fairly drop out of the sky for him. He would be going about some other business; he would meet a citizen jogging along the road, and instantly discern that he wanted the citizen's mount, subject of course to certain conditions. The pony was not more than five, was he? Six? Well, that was pretty old for a horse to begin learning a new trade. Pretty old, did you say? Why, that horse was so smart you'd find him learning new trades at twelve. Looking for something speedy? Here it was. Fifty witnesses could testify as to that. In search of a roping horse? This one could turn on a half-dollar. Well, how high was he? Fourteen-one? Just exactly. Well, maybe he might be suitable as to size, but he was spoiled because they had raced him. No, sir, they'd never raced him. Just tried him behind the barn. Fifty witnesses could testify, etc., etc., etc.; and in a few more minutes the two have reached the county seat, and the pony has been measured and sold for fifteen dollars, and next week turns out to be a prize for nerve and sense and agility. And even while he was being measured and more words about fifty witnesses were freely flowing—lo! another pony is observed tied in front of the saloon, and (to make it short) he's now eating a pensioner's oats in a Pennsylvania home.

It was not always so easy, even in 1893. Imagine to yourself a little talk at headquarters, of this sort.

There's a man at Voca says he has a

horse. (Voca was a place, half a day's ride, and it was pronounced Bokay, partly for Spanish reasons.)

What does he say it's like? Says he thinks we'll want it. Says if we do, we'll have to come for it. He's busy working off his road-tax. How do you find him? Over by the three-cornered school-house. Name's Brown.

This geography and identification seem enough, and an early morning start is made. The road turns away from the ranch and the open country of live-oak around it, across several barbed-wire fences, where you lay the panels down. Then you come into the hide of thorns, and the Spanish oaks, and the post-oaks, and the black oaks, and the scrub-oaks; and unless you are a botanist of parts, it may be doubted if you will notice anything deeper about these varieties than their spikes. You pass this lonely and intricate wilderness—intricate from its unbroken similarity, and its number of similar trails—and come down into a new, open country of stones and sand, and perhaps some cactus, and then a stream with pecan trees and a store, where nobody ever heard of the three-cornered school-house.

Yes, somebody comes in and does know all about it. You are to go that road, three miles, and turn to the left. And he points for you. At the end of three miles there is nothing. But at the end of four there is a man, sitting on a stump. Mr. Brown live near here? He thinks for a very long while, and



During Free Hours.

then tells you there is no Brown, that the nearest man this way is Mr. Williams. To the right. Seven miles. Near the three-cornered school-house?



He Matures in His Knowledge.

No. That's to the left. Not far. A short six miles from where we are standing. There is a man lives round there somewhere, and there's no reason his name should not be Brown. Never knowed what it was. Shouldn't be surprised to hear it was Brown.

We leave the man on the stump, and, after a mile or so along the left-hand road, an old lady in a buggy tells us that she guesses what we mean *ought to be* just about ten minutes the other side of those trees. What she meant by *ought to be* can never be known. Beyond the trees was a small and humble tenement, with another lady who was feeding pigs. Three-cornered school-house? She didn't know it. She hadn't lived here very long. There was a school-house burned down somewhere here once. But that was before she moved into the county. Never heard anybody say it was three-cornered. Did we mean the Red Creek school-house? If we did, we must have passed right by that, about five miles back. Mr. Brown? Oh, yes. He was working off his road-tax this week. He lived just behind the Red Creek school-house.

At three in the afternoon, having begun at seven, we found this hateful building, and Mr. Brown's wife in the



Between the Acts.

vicinity. Brown was not there. But the horse was, and if we would come with her —. We did go with her. The horse was a piebald arrangement with no eyelashes and long teeth, plainly starved from inability to chew. She told us it was a colt. We never knew what Brown would have told us.

But things must not be made out worse than their actuality. Upon our journey back, we met the man on the stump. He was now riding on a very decent pony.

Find that three-cornered school-house? Well, I guessed you wouldn't. Guess you did find Brown. I could have told you all about him. Didn't know you was inquiring for *that* Brown. Now, if you was in search of a horse—

So we reached headquarters long after dark, but not empty-handed. That pony turned out well also, beginning his strange education the next day by hearing what his brothers before him in the herd might have to tell him severally of their own experience.

How they had been roping ponies for a while, but not too long to injure their speed. How the ground stuff that was liberally fed to them out of a machine which went round and round in the center of the corral more than compensated for the loss of their manes, and the painful trials of docking. How you musn't mind if your tail did quiver eccentrically for a long while after the operation. How the bits were not so severe as some they had known in the days when they cut out cattle from the bunch. How you could run loose in the pasture during free hours, and kick and bite your enemies just as well as you ever did.

How there seems to be a sort of people living here or gathering here from elsewhere, who are quite certainly demented. How they attach the greatest importance to a detestable little white ball, and ride you after it, and express the strongest opinions about each other during the process.

It is to be supposed that the newcomer among the ponies, just as the new boy at school, must hear things of this sort in some language from his more initiated companions, and that very likely they endeavor to appal him with the grossest exaggerations concerning the day's work. His own work will probably begin with certain trials

of his mouth, and his eye, and his speed. He will be ridden about rapidly with perhaps a rope, and turned suddenly, or hauled up short.

Presently his rider will make him familiar with the implements of the strange game, riding him at all speeds and in all directions, and at the same time whirling the mallet round and round, or striking the ball forward, back, and at all angles.

Then as the weeks go on, and November has changed to February, the new pony will be himself well initiated. He will have become, in proportion to his native cleverness, almost as hot over the contest as the rider, whom he judged to be crazy at the start. There, in the midst of that singular landscape, with the live-oaks making you think of ap-

ples in New England, and the mesquite producing a cheating picture of Delaware peach orchards, while in reality such things are a good eight days' journey distant, he matures in his knowledge of polo until, about the end of March, he is ready to leave the land of his birth and take that eight days' journey and arrive where there are real peach trees and real apples; though it is not likely that he will have much chance to notice them. Possibly he will become quite famous. Certainly, as was said at the beginning, no animal can have more reasons for appreciating the inequalities of life. It is to be trusted that in Newport he does not entirely forget that he was once a plain American pony: one of the people; a son of the soil.

THE ROAD AND ITS REWARDS.

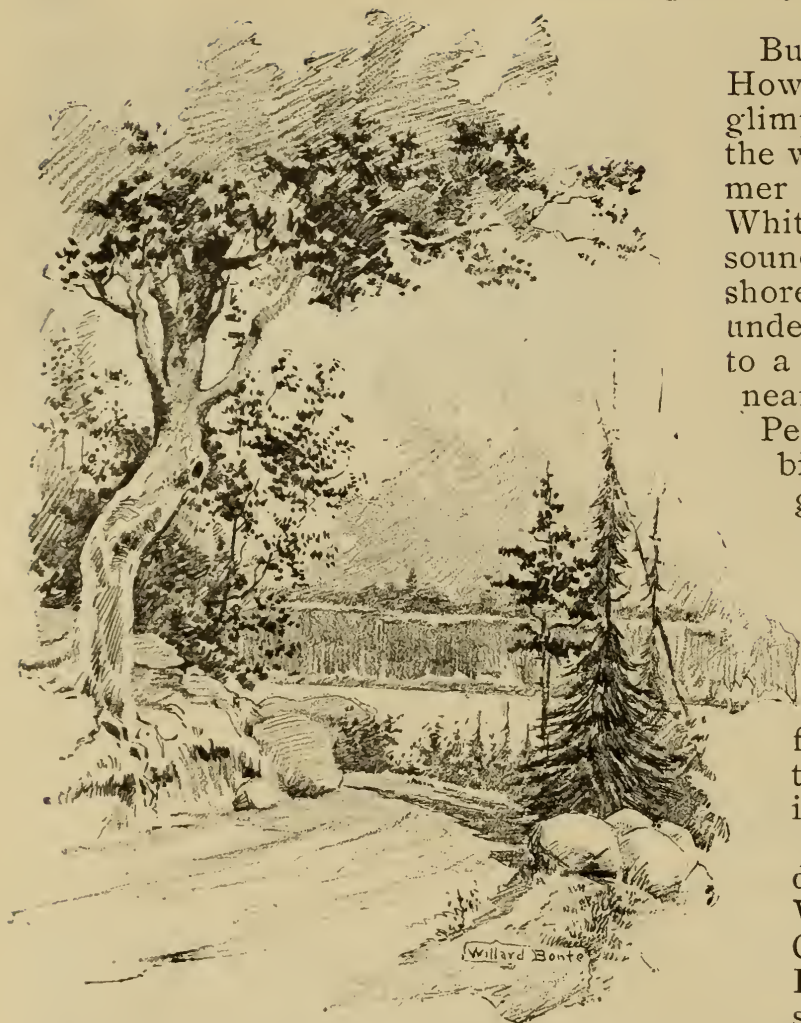
By Percival Pollard.

THE delights of the road have meant, in different days and to various minds, a variety of things. To the medieval troubadours they meant one thing; to Dick Turpin another; to William Black on his phaëton another; to the gypsy and the tramp and the authors of the verse in "Vagabondia" yet others. But to me, for to-day at any rate, they mean the charm and the adventure that the country highways and byways afford to whoso leaves the town awheel. For, saving only a horse of flesh and blood, there is nothing so easily leads the town-dweller into the pleasures of the pastoral as does the bicycle. There is something incomparably cheering in the consciousness that by one's own exertions, and at one's own gait and time, one is leaving the toil and moil and torment of the town farther and farther in the distance.

Let me at once dispel any thought that I have any intention of voicing the lamentably large army of century-riders, of scorchers, of cyclometer-serfs, and other unpoetic spoilers of the bicycle's best uses. No; these fellows are abominations! Yet in charity let me say they have their uses, too. Were it not for them the sweets of gentle, adventuresome touring and exploring might lose, a trifle, their flavor of exclusiveness. For how many, after all,

know how to take the real joy the road and the wheel can give? If you but note the strained expressions of those who ride with hunched-up backs, the slovenly and filthy attire that the great majority, the noble army of "rooters," think fit for wheeling, you will not be surprised that there be scoffers who turn up their noses at the bicycle. But the way of delight lies easily before you, calling you, by pleasant windings, gentle slopes, and alluring scenes, to leave the town, to scorn the scorching imps, and to hie through breeze and brake to where the humming of insects and the scent of clover give the reward you are seeking.

The memories that touring into the world awheel will provide will amply repay any and all mishaps that may come. For there are bitter-sweets that spice the virtues. Shall I ever forget an afternoon I spent skirting the Long Island Sound, with the mosquitoes feeding off my calves as the pedals flew round? Shall I ever lose opportunity to warn the world and his wife never to enter, awheel, the precincts of Lyme, Conn.? For Lyme is a place that, by my experiences, extends from the Thames to the Connecticut River, and that, once entered, it is impossible to escape. You will find on the map that there are several versions of the place—Lyme, South



Lyme, East Lyme, Lyme Ferry, and so on. But don't believe that the case is as simple as all that! No; the district teems with Lymes; you see Lymes everywhere; they become a mirage, a mania; the signposts tell you one moment that you are five miles from Lyme if you go south, the next that you are half a mile from Lyme if you go west. You feel as if you were in the maze at Hampton Court; you become bewildered; you feel like giving your steed its head and letting it steer you out to sea, into the nowhere, anywhere away from Lyme. A very Minotaur, a Black Hole of Calcutta, a man-eating tiger, is Lyme.

Nor has the L. A. W. saved the situation; the signposts avail nothing; they distinguish as little as the wayfarer one Lyme from another. No—if I may try a melancholy jest upon this tragic scene—there is but one Lyme I like, and that is the kind that owes to the Honorable Joseph Rickey the greater part of its distinction. Impressive as is the need of temperance awheel, I give you my word that any wheelman who has escaped the clutches of Lyme, Conn., is justified in pouring out Rickeys galore as libation to his luck.

But what delights that coast has, too! How, save awheel, can you get such glimpses of the Sound, such scents of the woods and fields, such hint of summer fashionables in brake or tilbury. White sails upon the water, and the sound of laughter coming from the sea-shore cottages. Sometimes the road under you is sandy, and you are driven to a towpath; sometimes, as you are nearer to New York—in Larchmont, Pelham, Rye—the macadam is like a billiard table, and you may safely give your steed its head, sit tight and drink in the suburban summer.

If the day is warm you need but ride a mile or two, to the very shore itself, to take a plunge into the ocean, to come forth with a glow and an appetite that no town thoroughfare ever fashioned.

These are but a few of the many delights of the road near New York. Whether you are in Westchester County, in Connecticut, on Long Island, or Staten Island, these possibilities exist: the good surface underwheel, the charm of sea and shore and sky and wood, the ocean eager to erase all possible fatigue.

And then the inns you come upon! No guide-book save experience will aid you here. You will find the hosts of the road most wonderfully increased since the pneumatic tire put life into our sleepy highways, but you will still find the artists among them rare enough. My own adventures with the tavern tribe give me nothing finer than the house of the venerable darky of the Rumson Road. To all who ever passed that way I need not give a preciser title. I came upon it in the dusk; the magnolias were shining white against the sloping lawn, and save for lights and merry laughter from a single dining-room, it betrayed no sign of life. I tried the front veranda, then the back. No creature seemed to care, or stir. At last a tall, a grizzled, soldierlike darky appeared, a person one would have longed to have as a butler, a born diplomat, a man with a genius for making you comfortable—at the highest prices. Yet one begrudged him not a penny. The dinners were so exquisite, such real works of art, of refinement in service; there was such a tender foresight,

such nice appreciation of one's own desire to make of dining an art, not an affliction. The chambers were so vast, so wonderfully wainscoted, with such a view down the lawns and slopes to where the Shrewsbury River spun its line of silk along the morning meadows. The daughters of the house, who served you, had so fine an air of knowing just the tone to wear with the quality; there were such pleasant volumes in the library, that any man of taste would rather leave the place with pockets bare than grudge a shilling of it as ill-spent. The wind was scattering magnolia leaves about the lawn the while I turned, again, the pages of "The Gentle Art of Making Enemies." As I put it down, I came upon a guide-book by Gustav Kobbé. Dear me, the people who have written guide-books! Why do they always write them so badly; why, to get glimpses of the real core of the charm, must one always turn to the books that are not guide-books, to Stevenson's "Inland Voyage," to Black's novels, to Twain's "Tramp Abroad," to Anna Dodd's "Three Normandy Inns"?

Some day I shall be tempted to write a book about the Road; but if people take it for a guide-book I shall die miserable.

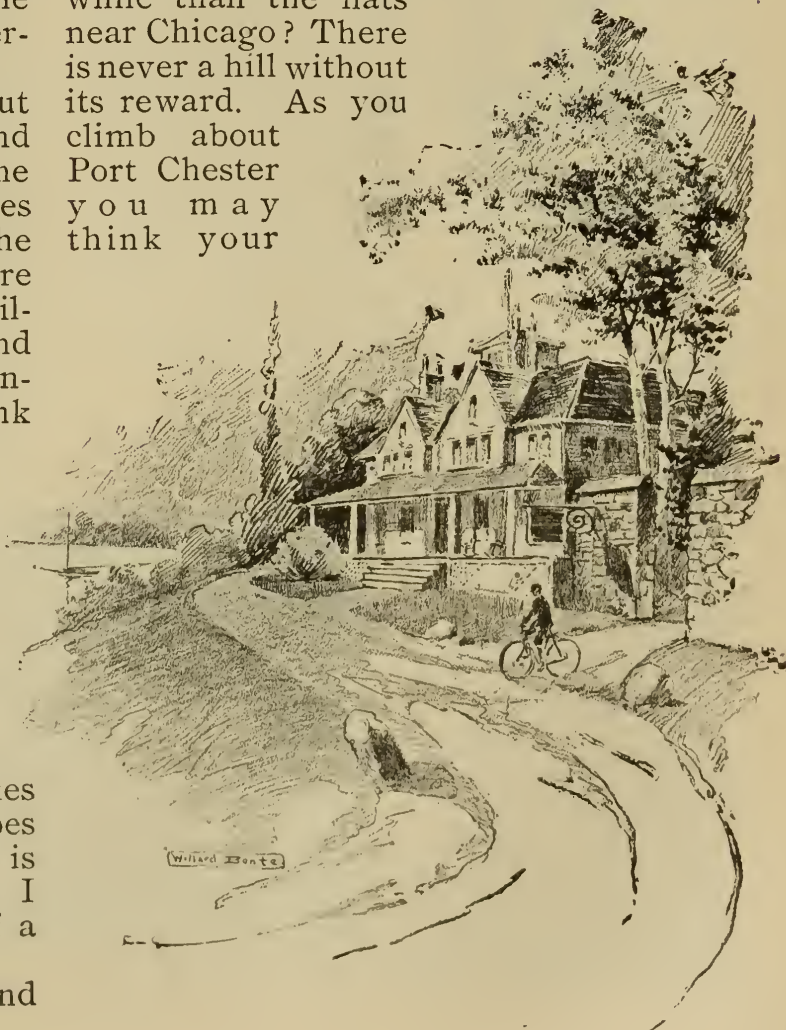
There is an inn on the Connecticut River, within sight of the Sound, and the coast of Long Island clear on the horizon, that also deserves the praises of all vagabonds awheel. In town the heat may be tumbling over scores; there it is always breeze. The sound of village gossip, talk of town-meeting and fisherfolk comes to you as you try, vainly, to encompass all the food and drink before you. This is true refreshment, for body and spirit; you leave feeling strong enough—almost—for the conquest of Lyme.

Across seas, too, there is that sweet inn where pigeons circle to the dovecote and where mine host laughs with you at the quantity of his wine the world believes it drinks, but does not—for he only makes enough for a cellar or so a year, does mine host of Rauenthal. But this is straying too far from New York. I yield too soon to the temptation of a book.

If you observe at all, you will find

much to keep you busy. Contrast the natures of the villagers and farmers. In Connecticut there is a house—saints save the owner!—whereby a well, with rope and bucket, bears the sign, "Free Drinking Water for Wheelmen." In New Jersey the natives employ themselves chiefly in chorusing yelps of "Rubber!" to one another. If you ask the way, you meet now with quick minds that shout the answer to you as you wheel slowly past, now with stupid idiots who gaze vacantly at you as you ask your question. You come upon the interfering parrots who tell you not to coast, ignorant of the fact that with one foot on a pedal and one braking against the front wheel you can descend more safely and slowly than in any other way.

Chiefly, on the road awheel, there is the joy of adventure into the unknown, the slow progress past scenes of charm, the breathtaking coasts down slopes, the lying on the grass knowing oneself miles and miles from town. Who that has ever come down the splendid slopes from Morristown, through Madison and Springfield, but has found the rolling of the New Jersey roads more worth while than the flats near Chicago? There is never a hill without its reward. As you climb about Port Chester you may think your



back is breaking, but beyond lies Greenwich, fair and gentle. Some may enjoy the banks of the Passaic, but give me, rather, the hills of the Hudson.

A familiar, obedient wheel, a picturesque road, and the knowledge that one is as neat as if on the lawn of one's Country Club—given these, and, whether alone or with an agreeable companion, one is quite certain of delight. And only in this way is one proving the bicycle a boon. The racing and the centuries may go hang. One keeps one's self and one's steed all spick and span, so that the people in the tilburies can find as little flaw as one can find in them. One never sets one's self a terminus so far as to interfere with gentle jogging, loafing into byways,

and halting at whatever pleasant spot the fancy seizes. One goes, say, part of the way by boat or rail; one follows one's changing fancies, not the map or the cyclometer. Thus, and thus only, one may taste the joys of the road. It seems to me that the League of American Wheelmen is wise to have let—as I do—the racing and the centuries go hang, and devote itself simply to make touring pleasanter.

I could, of course, attempt to sketch the more particularly delightful tours about the town. But I refuse to be a guide. I only wish to show you that the road is there; that you can fly the town and taste the road's manifest pleasures, if you will, and that your reward will be ample and never-ending.

THE HOPI SNAKE DANCE.

By George Wharton James.

Illustrated with Photographs Copyrighted by the Author.



The Twin Gods of War.

FOR many years the Hopi tribe of Pueblo Indians, of northeastern Arizona, have been known to white men by a nickname, a term of reproach, viz., the Moki. This is not their name and should not be

used. They are, correctly speaking, the Hopituh, or People of Peace.

Reasonably accurate descriptions of their thrilling rite, the Snake Dance, are rare.* The general writer describes it as a wild, frenzied, fanatical ceremony, hideous, repulsive, and disgusting; and he gives vivid word pictures of crazily-excited savages, in a half-nude condition, shrieking, yelling, and gesticulating in a manner suggestive of an asylum of the violently insane, while they toss around and handle venomous snakes

with an utter disregard of dangerous consequences.

Such accounts are not only devoid of truth as records of things and events observed, but utterly fail to get at the real significance of what is the chief religious ceremony of the most profoundly religious people of the known world. For the Hopi's religious life begins at birth and ends only at the grave. His natal ceremonies are more elaborate and full of meaning ritual than those of a Christian. In adult life most Hopis give from four to sixteen days of every month to religious observances in addition to the large place such occupy in their everyday life.

The Snake Dance is a solemn and dignified act of worship, participated in by serious-hearted, devout-souled people, with earnest sincerity of purpose and according to the highest truth revealed to them. Hence, without fear of truthful contradiction, I wish to assert with emphasis that no religious ceremony known to the white man surpasses—and I doubt if any one equals—in dread solemnity that of this rude and savage people when they handle and wash their so-called Elder Brothers, carry them in their mouths, dance with them, and com-

*These are the writings of Jesse Walter Fewkes, of the United States Bureau of Ethnology, in the Bureau reports and in the *Journal of American Ethnology and Archaeology*; the "Moki Snake Dance," by Dr. Walter Hough, published by the Santa Fé Route; *Scientific American*, June 24 and September 9, 1899; *Wide World Magazine*, January, 1900, and an article in *Harper's Weekly*, August 15, 1896, by Hamlin Garland.



The Hopi Pueblo.

pel them (so they think) to listen to their songs and prayers.

In this account I propose to describe the rites as briefly as possible, devoting myself more particularly to those inner and overlooked portions of the ceremonies, which, however, to the observant and penetrating mind will be seen to be of the highest importance. Even a professional expert, seeing the dance but once, would not presume to describe it accurately from its exterior side, and from its inner side not at all. Having seen it now a number of times and having been allowed to witness four times what only two other white men (Dr. J. Walter Fewkes, of the Smithsonian Institution, and Rev. H. R. Voth, formerly missionary at Oraibi) have been allowed to see *in extenso*, it may be presumed that my account is not the carelessly written description of the ordinary observer.

The Snake Dance and its attendant rites occur every other year at five of the seven villages of Hopi, and can be witnessed in two villages on the odd years, and in three on the even years.

For a long time access to the Hopi country was by way of Keam's Canyon; hence the three rocky table-lands

on which the seven villages are perched were known, respectively, as the first, second and third mesas. More correctly, they are now known as the eastern, middle and western mesas, though, to be rigidly accurate, Shimopavi is on a separate mesa, or, at least, an arm of the middle mesa.

On the eastern mesa are Walpi, Sichomavi, and Hano. Walpi is the chief town of this mesa, and here the Snake Dance is given in more dramatic form than in any other of the four villages where it is performed.

This is doubtless owing to the fact that Walpi has been more accessible to the white man than the other villages, and his influence has been felt in leading the fraternity to make the event as spectacular as possible.

Oraibi is the western outpost of Hopi civilization, and is twenty miles west of the middle mesa. This is the Hopi metropolis, with almost as many inhabitants as in all the other villages combined, the sum total being between two and three thousand souls.

The two fraternities that alone can perform the Snake Dance ceremonies are the Snakes (Tcū'-a-wymp-ki-a) and the Antelopes (Tcūb-wymp-ki-ya). Each of these



The Antelope Altar.



Praying at the Shrine of the Spider Woman.

lope fraternities meet together, and, after a ritualistic smoke, determine the time when the ceremonies shall begin.

How this date is determined we do not know as yet; possibly some solar phenomenon may ultimately be found to account for it.

The announcement is made by the public crier, who ascends various house-tops of the village and in a loud, explosive voice informs the listeners that in so many days the ceremonies will begin.

Then, that none may violate the sanctities by intruding upon the secret and mystic ceremonials, the *ndtchi*—two eagle-wing feathers tied to a short stick—is placed in some matting at the hatchway of the kiva. Now beware, Hopi and stranger alike, how you approach this secret place. The superstitious Hopi devoutly believes that if he even steps upon the roof of the kiva he will speedily "swell up and burst."

Later this *ndtchi* is exchanged for the *awatandtchi*—a bow and arrows with

fraternities has a secret, underground ceremonial chamber, called a kiva, entered by a ladder down a hatchway.

Several days prior to the commencement of the ceremonies the leading men of the Snake and Antelope

horsehair suspended from the strings—and these are placed on the top of the ladder of each kiva.

In the meantime the altar of the Antelope fraternity is set up. This altar is a mosaic of different colored sands, surrounded with sticks from which feathers depend. These latter are bahos or prayer sticks, and without them no Hopi's prayer is efficacious.

The pattern or *motif* of the altar is four zigzag stripes, which represent the lightning, the symbol of the Antelope fraternity. This symbol suggests to us, what we now know to be the fact, that these ceremonies have something to do with prayers for rain—for the lightning is inseparably connected with rain in the minds of these people. The careful observer will note that on this sand altar are four zigzags, and that they have two different heads to them. These differences are to represent the male and the female lightning. The Hopi sexualizes all the forces of Nature.

The chief of the Antelope fraternity at Walpi, and really the directing spirit of the whole of the ceremonies, is Wiki, a grand old man, who, in any land and with any people, would rank as a leader. A man of genuine and sterling character, he is beloved by all his own people, and by those of the whites who are fortunate enough to know him. I secured a photograph of him as he was about to enter the kiva on the day of the dance. He had the lightning zigzag upon his body, as do all the priests of this fraternity during the performance of the open-air ceremony.

The ceremonies of the Antelope kiva for the succeeding days consist of the making of bahos, or prayer sticks, ceremonial smoking, praying and singing. But the profound ritualistic importance attached to every act can scarcely be estimated by those who have not personally seen the ceremonies. The prayer sticks are prayed over and consecrated at every step in their manufacture, and the altar is prayed over and blessed each day. Every object used is consecrated with elaborate ritual, and the great smoke is made by each one solemnly participating in the smoking of *ómowûh* (the sacred pipe). The smoke from this pipe soon fills the chamber with its pleasant fragrance (the tobacco used being a weed native to the Hopi region), and it is supposed to ascend to



Antelope Priests Leaving the Kiva.

the heavens and thus provoke the descent of the rain.

The songs are sung to the accompaniment of rattling by the priests, and each day sixteen songs are rendered.

During the singing of one day one of the priests strikes the floor with a blunt instrument, and Wiki explained this to me as the sending of a mystic message to a member of the Snake-Antelope fraternity at far-away Acoma, telling him that the ceremonies were now in progress and asking him to come. Strange to say, eight days later, certain Acomas did come, thus giving color to the assertion of the Hopi fraternities that the Snake Dance once used to be performed on the glorious peñol height of Acoma, as was briefly stated by Espejo.

Among other ceremonies one of the most important is the smoking upon the *tiponi*. The *tiponi* is a large bunch of feathers and is the palladium of the fraternity. No altar can be set up without it, and prayers offered without it, during a ceremony, are of no effect. The *tiponi* of the Antelope fraternity is seen in the arms of the Oraibi chief priest Tubangointiwa. An illustration of the superlative importance attached to the *tiponi* is given in the fact that at Oraibi the Snake fraternity does not possess one. Hence they are unable to set up an altar in the kiva as the Snake fraternity at Walpi does, and they perform all their ceremonials and worship before their "twin gods of war."

It is in the Snake kiva that the snake charm liquid is made. In the centre of a special altar a basket made by a Kohonino Indian is placed. In this are dropped some shells, charms, and a few pieces of crushed nuts and sticks. Then one of the priests, with considerable ritual, pours into the basket from north, west, south, east, up, and down (the six cardinal points of the Hopi), liquid from a gourd vessel. By this time all the priests are squatted around the basket, chewing something that one of the older priests had given them. This chewed substance is then placed in the liquid of the basket. Water from gourds on the roof is also put in.

Then all is ready for the preparation of the charm. Each priest holds in his hand the snake whip (a stick to which eagle feathers are attached), while the ceremonial pipe-lighter, after lighting the sacred pipe, hands it to the chief

priest, addressing him in terms of relationship. Smoking it in silence, the chief puffs the smoke into the liquid and hands it to his neighbor, who does the like and passes it on. All thus participate in solemn silence.

Then the chief priest picks up his rattle and begins a prayer which is as fervent as one could desire. Shaking the rattle, all the priests commence to sing a weird song in rapid time, while one of them holds upright in the middle of the basket a black stick, on the top of which is tied a feather. Moving their snake whips to and fro, they sing four songs, when one of the chiefs picks up all the objects on the altar and places them in the basket.

In a moment the kiva rings with the fierce yells of the Hopi war-cry, while the priest vigorously stirs the mixture in the basket. And the rapid song is sung while the priest stirs and kneads the contents of the basket with his hands. Sacred meal is cast into the mixture, while the song sinks to low tones, and gradually dies away altogether, though the quiet shaking of the rattles and gentle tremor of the snake whips continue for a short time.

Then there is a most painful silence. The hush is intense, the stillness perfect. It is broken by the prayer of the chief priest, who sprinkles more sacred meal



Kopeli, Snake Chief.



A Snake Priest.



Antelope Priests Circling before Kisi.

into the mixture. Others do the same. The liquid is again stirred, and then sprinkled to all the cardinal points, and the same is done in the air outside, above the kiva.

Then the stirring priest takes some white earth, and mixing it with the charm liquid, makes white paint which he rubs upon the breast, back, cheeks, forearms, and legs of the chief priest. All the other priests are then likewise painted.

Now there is nothing whatever in this liquid that can either charm a snake or preserve an Indian from the deadly nature of its bite. Even the Hopis know that all its virtue is communicated in the ceremonies I have so imperfectly and inadequately described. I make this explanation lest my reader assume that there is some subtle poison used in this mixture, which, if given to the snakes, stupefies them and renders them unable to do injury.

On the mornings of the eighth and ninth days eight of the sixteen songs are sung before sunrise, and a new and dramatic element is introduced. Certain persons representing Tiyo, the Snake hero from whom the clan is descended, and Tcii-a-ma-nya, the Snake virgin, are present in the Antelope kiva, together with the chief priests and several members of the Snake fraternity with their wives and children.

According to Hopi mythology Tiyo, who had a brother and two sisters, was wont to sit on the edge of the cliffs of the Grand Canyon of the Colorado River

near to where the Little Colorado makes its junction with the main river, and there brood over the strange fact that the waters ever flowed on and never returned. Where did this volume of water find rest? He brooded over the matter and questioned his father, until he determined to go and solve the mystery for himself.

He took a hollow cottonwood tree and equipped it with food for a long journey; and his father also prepared and instructed him in the purport of certain gifts which he was to present to the divinities of the underworld, which he was assured was the destination of the ever-flowing water. When all was ready he floated away. He passed through deep canyons, over smooth waters and into swift-rushing torrents, plunged down cataracts, and for many days spun through dangerous whirlpools.

One day the log stopped and he found himself near the home of the Spider Woman, she who weaves the clouds from which come the rains. She received Tiyo very kindly and urged him to enter her home, where she hospitably entertained him for several days.

Then she accompanied him to the Snake house, urging him to be exceedingly brave in face of all the dangers he would encounter, and gave him a charm which would protect him.

He needed it, for he met Gatóya, the great snake, and two great bears which would fain bar his way. But the charm made them harmless, and he was able to enter the Snake and Antelope kivas, where he found beautiful sand altars (similar to those now made by the two fraternities); and the chief of the Snake Antelope kiva told him he had long



Snake Priests in Front of Kisi.



From a Copyright Photo by S. H. Maude, used by permission.

Priests Carrying Snakes in Mouth.

been expecting him, and that ere he returned he would teach him many things. Soon Tawa, the Sun, came with his beautiful shining shield, and he accepted the gifts Tiyo made, and took him with him through Shi-pa-pu into the underworld, where the parent of all germs lived. Here also he was well received, and promised that the prayers of his people should always be answered. And as the Sun took him on his journey to the East he informed him that of all the gifts he was to take back to his people none would equal the rain-cloud which would be given him by the chief of the Snake Antelope kiva.

When he returned to this chief he was gladly welcomed and told: "Here we have abundance of corn and rain; in your land there are but little. Do this thing and that (recounting the rites of the kivas as practiced by the Hopi of to-day), and when you display the white and black on your bodies the clouds and the rain will come."

Then the Spider Woman took Tiyo up in a basket in which she had placed him with a maiden on each side, and sailed with him to his home. Tiyo took the maidens to his mother's home, and he and his brother soon announced that they would wed the maidens. On the fifth morning after their arrival Tiyo proclaimed that in sixteen days he would hold the feast, and that is the reason, so the Hopi say, that the Snake Dance is announced sixteen days ahead. Tiyo and his bride went into the Antelope kiva, and his brother with his bride into the Snake kiva, where they

went through nearly all the ceremonies now practiced.

Then clouds came, and Snake people from the underworld came and ate corn pollen in the kivas. New groups came thus daily, and each morning they were found in the valley changed into snakes.

On the ninth morning the Snake women (Tiyo's and his brother's brides) said: "Go out and catch the Elder Brothers (the snakes), and wash them and dance with them." And this was done, and the snakes then returned to the underworld, carrying the petitions of the people.

This, in brief, is the narrative as related by the present chief, according to Dr. Fewkes, and I have heard a similar story, with variations, several times.

Hence all the ceremonies of the kiva and the concluding dance are undoubtedly a prayer for rain, and all the rites below are performed mainly because they were commanded by the Elders, and are supposed to have rain-making powers.

The secrecy with which they are performed can also be understood from this crude narrative. They were secured by Tiyo with great difficulty; they are sanctified by antiquity, and the fact that they have been efficacious in bringing rain through all the ages. Hence they must not be treated lightly, or the knowledge allowed to get into the minds of those who would profane it.

Everything, therefore, is done decently and in order, and this explains the great repugnance the Snake and Antelope fraternities have to allowing strangers to witness the secret rites of the kivas. It accounts also for the tender handling of the snakes, which are in absolute reality, to them, their blood brothers. To slay them would be to commit murder; indeed a snake is never even hurt by a Hopi. He is an Elder Brother, to be treated with kindness and hospitality.

And here also is the explanation of the singular rite of washing the snakes, which I have four times witnessed. These Elder Brothers cannot enter into the rites unless they are made ceremonially pure. They are unable to wash themselves, so the Younger Brothers must do it for them.

But before I describe this most thrilling secret ceremonial let me tell of the propitiation of the Spider Woman, and



Gatherer Picking up Snakes.

the method by which the snakes are caught.

One morning the chief Antelope priest left the kiva with great solemnity, bearing with him a number of bahos he had made with extra care. I followed him and found him depositing them at the shrine of the Spider Woman. He explained to me that, as this mythical personage weaves the clouds, she must be propitiated, or no rain can come; hence the prayers he offers to her.

The chief priest of the Snake fraternity at Walpi until last year was Kopeli, a Hopi well known and revered by many white men. Kopeli, though a young man, was a born leader, and to him is undoubtedly largely owing the dramatic rendition of the Snake Dance at Walpi during late years. His death was a great misfortune in many respects, and the cause of ethnological science has lost in him one who was of considerable service. His brother was elected to succeed him.

Under the direction of the chief priest the catching of the snakes takes place. Prayers are offered in the kiva that none of the Elder Brothers may do injury to their Younger Brothers. Then with a sack of sacred meal, a hoe, a small buckskin bag, and a snake whip the priests start out for the hunt.

Descending to the valley they go to where the snakes are generally to be found, and there, with reverent prayers, begin the search. As soon as a snake is seen he is sprinkled with sacred meal and addressed in terms of family relationship. Then, if he shows a disposition to coil and strike, the snake whip is brought into play. He is gently stroked and talked to, and as soon as he feels the tickling of the feathers and uncoils, the priest, with a dart of great rapidity, stoops and picks him up and inserts him in the bag brought for that purpose.

For four days this gathering of the Elder Brothers takes place, one day the search being to the north, another to the west, a third to the south, and the fourth to the east.

During this search those Hopi who are not members of the Snake or Antelope clan, are careful not to look upon either priests or snakes, lest serious injury should come to them, and, worse still, the prayers offered be of no effect in producing the rain.

At noon of the ninth day's ceremonies the washing of the snakes takes place in the Snake kiva.

At a given time the chief priest of the Snake fraternity, with several of his assistants, squat around a large bowl full of water, brought from a spring supposed to possess special virtues. The kiva is some fifteen or sixteen feet square, and its only light is gained through the ladder hatchway from above. At one end of the room is the sand altar, and at the other are the ollas or jars containing the snakes. Two men hand the snakes to the priests. The main part of the floor of the kiva is taken up by the priests, some thirty, all told. In the centre of this number I was permitted to take my place.

After a prayer the rattles were gently shaken and a song was begun in very soft tones. At the same time the priests who had charge of the snakes brought two to each of the priests who sat around the bowl. As the writhing, wriggling reptiles were dipped into the water again and again, the song increased in

power until it was at double forte. Then, without a word of warning, the washing priests threw the snakes over our heads upon the altar at the other end of the room. As they did so, half the singers burst out into a blood-curdling yell, six times repeated, "Ow! ow! ow! ow! ow! ow!" The scene and noise were startling in the extreme.

In a moment all was still again. More snakes were brought, washed, thrown, and the shouting was repeated; and this continued until from 150 to 200 snakes were washed and thrown upon the altar. There they were stirred into the sacred sand and among the bahos, in order, as one of the priests told me, that they might become sanctified.

When all were washed, all the priests save one went home to prepare for the evening ceremony. The snakes were allowed to become quiescent.

At sunset the concluding ceremonies begin. For hours the crowds of Hopi, Navaho, Apache, and white spectators have been assembling, and the house-tops are covered with them.

Suddenly all eyes are directed toward the Antelope kiva. The chief priest of the Antelopes, followed by all the others,

ascends the ladder. They form in line and then march to the dance plaza where a bower of cottonwood branches stands, called the kisi, inside which the ollas containing the snakes are placed.

After circling in front of the kisi, the priests line up before it, and sing and pray, awaiting the coming of the Snake priests. When these come from their kiva they do likewise, and then line up facing the Antelopes. After a few minutes' singing and praying the handling of the snakes begins. The Snake priests divide into groups of three, called respectively the carrier, the hugger, and the gatherer. The carrier receives from the warrior priest inside of the kisi a writhing snake, which he immediately places in his mouth, the head to the left, the body wriggling down to the right.

And this is the portion of the dance that has been so distorted and untruthfully described. When the priest receives the snake, the hugger places his arms around the neck of the carrier, and, in a most dignified manner, these two, followed by the gatherer, amble or prance or dance around the plaza. At one place a line of matrons, in another, of girls, stand ready with baskets full of



Throwing the Snakes into the Circle of Sacred Meal.



After the Ceremony.

sacred meal to sprinkle snakes and dancers.

When the carrier has borne his snake about two-thirds of the circuit he throws it to the ground, and it is now the duty of the gatherer to advance and pick it up. Generally there is no trouble in doing this, but, now and again, a rattle-snake coils and prepares to strike. Then the snake-whip comes into play, and the priest, tickling the snake with it, makes him uncoil and seek to escape. He is then easily picked up.

the Snake priests dart upon them, grabbing in their hands all they can pick up, and, rushing down the steep trails into the valley, there deposit their Elder Brothers, kneel down and pray over them, and then return to their kiva.

Here they drink large quantities of an emetic for purposes of ceremonial internal purification, and when this emetic has accomplished its work the rites of the Snake Dance in that village for the next two years have come to an end.

This round of carrying snakes, throwing them to the ground, and picking them up, continues until all the snakes are brought from the kisi, the Antelope priests the while remaining in line and singing.

Then the Snake chief priest makes a circle of the sacred meal, and at his signal, all the priests advance towards it and throw the reptiles they are carrying into it. Prayers are said over them, sacred meal and water sprinkled over them, and then, like a flash,

A SONG OF SUMMER.

J. A. Coll.

I AM the child of the sunny skies, The life that was born of spring, Come into the heart of glen and mere And the soul of everything. I hurry the sap of hazel boughs To the promised nuts of brown, And I draw the doubled oak limbs up, And I drill the rootlets down.	I blush in the pippin's cheek of red, I glow in the pink of peach; I give my hand to the fern and vine, And I give my heart to each. I lift my eyes when the gentian lifts Her eye of a magic blue, And when the poppy speaks of rain I tell of the tempest, too.	The miracle gift of life am I, The birth of the bud and seed, The thought that opens the timid rose, The laughter that rocks the reed; An undertow in the summer sea Of daisies that dip and nod, And the beauty mark of centuries In the handiwork of God.
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THE WAY OF THE SPORTSMAN.

By Caspar Whitney.

This is the season in which it is unlawful to kill or have in possession quail, grouse, pheasant, prairie chicken, partridge, woodcock, plover, snipe, wild fowl, or deer. Restaurants which serve this game are liable to legal prosecution and fine; and people who eat it abet the work of the game butchers and defeat the efforts sportsmen throughout the country are making to provide needful protection for our game birds and animals.

National Support in Game Protection.

It has been a season of remarkable activity in protective legislation for game—fur and feather; and nothing has emphasized the tremendous gain made in this worthy cause so much as the dawn of an intelligent understanding of the subject at Washington among the nation's lawmakers. To a certain extent each State must work out its own salvation in the matter of game protection and forest preservation, but there is a point beyond which local officials are powerless and where the National Government can render the valuable aid it has hitherto withheld.

There must in fact be national co-operation if the protective measures are to be carried out as completely as the situation demands; and there can never be co-operation until in Congress there is genuine sympathy with the objects sought. It is the apparent creation of that sympathetic understanding at the Capitol which gives hope of great results in the present year.

To the Hon. John F. Lacey, of Iowa, therefore, sportsmen owe unfeigned gratitude, not alone for the splendid bill he successfully championed through Congress, but for the liberal education on the subject of bird and animal life needs, given members of the House of Representatives during the course of his eloquent and convincing plea for game protection.

That the instruction was not unneeded may be judged by the various questions put to Mr. Lacey by members of the House. One distinguished gentleman wished to know "What kind of a bird is the mongoose anyway?"

Mr. Lacey's Strong Bill.

It is certain that in the interest of game protection a bill has not been before Congress of such importance as Mr. Lacey's, the purpose of which is "to enlarge the powers of the Department of Agriculture, prohibit the transportation by interstate commerce of game killed in violation of local laws and other purposes."

Literally the amended principal section of the Act will read, if the Senate acts in sympathy with the House and with a righteous cause,—

SEC. 5. That all dead bodies, or parts thereof, of any foreign game animals, or game or song birds, the importation of which is prohibited, or the dead bodies, or parts thereof, of any wild game animals, or game or song birds, transported into any State or Territory, or remaining therein for use, consumption, sale, or storage therein, shall upon arrival in such State or Territory be subject to the operation and effects of the laws of such State or Territory enacted in the exercise of its police powers, to the same extent and in the same manner as though such animals or birds had been produced in such State or Territory, and shall not be exempt therefrom by reason of being introduced therein in original packages or otherwise. This Act shall not prevent the importation, transportation or sale of birds or bird plumage manufactured from the feathers of barnyard fowl.

Now the strength of this bill is its unflinching grappling with the commercial side of the question, which, after all, is the vital one. So long as dealers are permitted to sell game in the close season, all the laws and all the wardens in Christendom will not be sufficient to stop the killing of game out of season. Laws which permit dealers to sell birds after the legal season for shooting them has closed are an actual menace rather than a service.

Mr. Lacey's bill conveys a twofold

blessing ; it protects the game and softens the consequences of average State legislation.

The Dealers' "Fence." Hitherto dealers have very profitably employed the inconsistency of State laws and the importation privileges as a legitimate screen behind which to conduct illegitimate traffic. For example : In New York the present law permits dealers to sell imported grouse during the State's close season; the result is that while a Scotch grouse may be hung outside the shop, certainly ninety per cent. of those sold over the counter have been killed in New York.

It is perfectly plain to all thinking men that the only practical way of insuring protection for game is to absolutely prohibit the sale of it, regardless of whence it comes, in each State from the beginning to the ending of the close season in that State. The dealers' loophole has been the one through which the greatest percentage of illegitimately-killed game has found escape. It is, perhaps, the one which most threatens the safe-guarding of game birds. So long as dealers can sell, pot-hunters will kill ; and dealers can sell to certain kinds of people, so long as they are supplied by the pot-hunters.

There is a class of small-minded creatures, chiefly to be found in large cities, who fancy their familiarity with the customs of polite society would be questioned if they failed to include a bird on their dinner menu, whatever the time of the year, and even though the bird be the tasteless relic of the cold-storage warehouse. But that class is yearly growing much smaller—sportsmen are spreading intelligence as well as the sporting spirit.

Nefarious Traffic in Inter-State Game.

But an equally important provision of Mr. Lacey's bill deals with the slaughter of out-of-season birds in one State to supply the market in another State where their sale is tolerated. We see the harmful working of this traffic chiefly in the Southern States, where entire districts have been literally swept of their quail. Georgia, for instance, has most excellent laws for the protection of its insectivorous and game birds ; yet pot-hunters set and trap quail contrary to the local law, pack them in boxes and ship to States that permit the sale of out-of-season game. This is done

secretly, of course, but it could be exposed and punished if such strange inconsistencies did not exist in State laws. Legislation has long been sought to stop this destroying trade in game birds and deer killed in defiance of State laws.

Only through an Act touching inter-State commerce and therefore by the means of national legislation, could such traffic be reached. Mr. Lacey's bill aids and does not interfere with State legislation. It carefully avoids all conflicts of such a character. It protects only such game as is protected by the local laws. It begins when the game is loaded upon the cars to be shipped outside of the State in which it was killed. It prohibits inter-State commerce in the game locally protected. It takes nothing from the powers of the State, but on the other hand, it carries out the spirit of the local laws and gives protection at points presently unguarded.

It means, in a word, that the State will have the support of the National Government in carrying out the spirit as well as the letter of the law. It is protection in the broadest sense, and on a feasible, intelligent plan. It means, too, that the future of protection rests more than ever with the State legislatures. Whatever laws they make to save the game, the Federal Government stands ready to back them.

It is the greatest achievement in the history of game-protection legislation.

Other Wise Provisions. But there are other features in the Lacey bill bearing significantly on the general subject of game and bird protection.

One of the clauses provides for an enlargement of the power and duties of the Department of Agriculture, so as to "include the preservation, distribution, introduction, and restoration of game birds and other wild birds." This means that by purchase and subsequent distribution there may be restoration of birds which, in various parts of the United States, have become scarce or extinct. Another provision will regulate the introduction of American and foreign birds or animals in localities where they have not heretofore existed. This means there will be no importation of birds like the English sparrow or starling, or animals such as, for example, the rabbit or mongoose, which are harmful to native agriculture or bird and animal life.

The significance of this national legis-

lation is no doubt only half appreciated by the average reader. He views it perhaps as part and parcel of the routine work of the session, but in reality it is the beginning of a new and enlightened era in protective legislation. It means that one of these days when we have a President who is more of a sportsman and less of a politician there will be created a—national game protector let us call him for want of a better name at the moment—who will serve the protective interests of wild bird and animal life, just as Gifford Pinchot, Chief Forester, now so ably supervises the work for the preservation of our forest lands.

The best interests of game protection demand such an official; one who will labor incessantly to bring about uniformity in State game laws—similarity of State open and close seasons—general prohibition of spring duck-shooting, and to spread among State legislators a more intelligent conception of the significance of game protection to the industrial and economical life of the people.

Stop Spring Duck-Shooting. Quite the most important question before sportsmen just now concerns spring duck-shooting. Reports from the various sections of the country indicate a gradual lessening of the practice, but the number of ducks diminishes yet more rapidly, and there is great fear that, unless stopped by law, spring shooting will outlive the wild fowl.

There are many men who shoot ducks in the spring and resent an imputation against their sportsmanship; there are those who argue their sportsmanship unquestionable so long as they keep literally within the letter of the law; there are others who maintain that no harm results from shooting migratory birds in the springtime, or wild fowl on salt waters.

There are many and specious arguments used by those who kill ducks in spring. Half of these are advanced by the men who are best described as weakly good, *i. e.*, who really mean to be sportsmen, and are sportsmen in a mild, unlearned sort of way; and the other half are put forth by that class whose sporting excursions are actuated by a desire to go out and kill something.

Life is too short to discuss separately the several arguments advanced to excuse spring duck-shooting. I shall sim-

ply set down some facts here which speak for themselves and cannot be confuted.

What Spring Duck-Shooting Has Done.

Very careful and learned inquiry by the New York Zoölogical Society and by other similar organizations of sportsmen has disclosed the fact that within the past dozen years the decrease in wild water fowl and in shore birds has been fifty per cent. ! Let it be borne in mind by those not in accord with my sentiments that these figures are arrived at by painstaking and intelligent computation.

Now the question properly follows, what has caused this tremendous decrease? Not disease, not a change of habitat, not domestication, but shooting. It is true, of course, that autumn shooting has had a share in the terrible slaughter visited upon ducks in recent years, and is, therefore, somewhat responsible for the decrease. But it is also true, as has been proven more than once and in several different directions, that game of any kind shot under reasonable restriction in autumn or the legitimate season can hold its own, *i. e.*, the losses of the autumn are repaired naturally in the following spring breeding season.

The great decrease in wild fowl life is explained, therefore, by there being no respite from shooters in the breeding season and at a time when all other game birds are exempt by law from persecution.

Illogical Contentions.

It is absurd to distinguish, as some spring shooters of otherwise excellent natural tendencies pretend to do, between months and localities in the springtime. The contention, for example, that ducks may, with sportsmanly and humane propriety, be shot in March or in April, before the actual mating has begun, or on salt water as distinguished from fresh, is simply trivial and entirely unsupportable. The literal truth, as any one may discover by experiment, is that the female duck carries embryonic eggs so early as March, and that therefore every female duck killed means a decrease in wild fowl life of anywhere from six to a dozen.

But, for the sake of still further driving home the truthful result of this spring shooting business, suppose the female had no eggs at the time she was killed, as many men assert to excuse their spring shooting. Suppose she had not

mated. So long as she is killed, what difference does it make whether she had eggs or not? The fact remains that the otherwise natural increase of the fowl is prevented just the same.

The crime of spring shooting lies in its slaughter of the female, which yearly keeps lessening the wild fowl's natural means of increase, and of supplying the places of those killed in the autumn.

It is to this cause that the great decrease in ducks is directly attributable. There is no argument that can be brought forward to excuse the killing of wild fowl or of any wild bird or wild animal, not vermin or pest, in the spring-time; and the men who do so are deluding themselves, some wilfully, others unwittingly, with the belief that it can be done in one way or another without harmful results. Because, however or wherever you shoot in spring the result is the same—*viz.*, death of the mother bird.

There is no way in which, or any waters or any section where, duck can be killed in the spring without bringing a charge of unsportsmanly conduct against the offender and disaster irretrievable upon the ducks.

A National Prohibitive Law Required. Migratory game birds—among which the chief sufferers from spring shooting have been duck and snipe—cannot be said to be the property of any one State, as may be affirmed of quail and grouse and others. Therefore a law should be enacted by Congress prohibiting spring shooting in every State and Territory of the United States.

Surely the situation is sufficiently serious to warrant national legislation, for there can be no doubt that unless spring shooting is abandoned absolutely, the day is not far distant when ducks will become as scarce as wild pigeon.

The various State laws touching spring shooting are in the majority of cases entirely insufficient, and in the case of the most important Eastern States are distinctly bad.

For example, Maine, Connecticut, New York, New Jersey, and Pennsylvania permit spring shooting up to May 1st. The very States in which we should naturally expect the most enlightenment, exhibit the least. This is due, of course, to the preponderance on the game commissions of the politician, who has more interest in his friends, the pot-hunters

and dealers, than in the survival of bird life. Here in New York, with Governor Roosevelt and his recently appointed commission in office, we confidently expect spring shooting to be soon forbidden.

Indiana, Ohio, Iowa, Massachusetts, and Maryland show some slight improvement, their close season beginning April 15th. Virginia, Missouri, Kentucky, Utah, North Carolina, and the District of Columbia prohibit shooting from April 1st, and are therefore a bit better. Florida and California, with March 1st, and Texas, with March 15th, as the beginning of the close season, are a further improvement.

No Open Spring Months. But the only real close seasons that offer the proper protection to migratory wild fowl are those of Minnesota, Wisconsin, and Vermont, which begin January 1st, and of Rhode Island and Michigan, which start from February 1st.

What these last-named States have done all can accomplish, if the proper intelligence and sportsmanship prompt their respective legislators and Governors.

Meantime it is the duty of every man who has humane and economic instincts to not only himself stop spring shooting, but to urge similar action by such of his friends as also offend and to exert all his influence toward the enactment of legislation for the same beneficent purpose.

But really what is needed is a national bill, and if the Hon. John Lacey will father one, I am sure it will achieve success equal to that prohibiting interstate commerce in dead game, which he has just triumphantly carried through at Washington.

The Sporting Spirit. I have been lately asked to define sportsmanship—to explain what is meant by the sporting spirit. Though somewhat surprised, perhaps, at the need of such explanation, it is pleasant at least to note the desire to learn the tenets of sportsmanship and the spreading wish to live up to such a standard.

Sportsman is a word only half understood. Popularly it is believed suitably employed when applied to any man who shoots, fishes, rides, hunts, or devotes himself more or less assiduously to one or another of the various forms of sport. It may be correctly used in

that sense ; frequently it is, I am happy to say.

But it by no means follows that a man who does one or all of these things is necessarily a sportsman ; he may be an athlete, or a shooter, or a hunter, or an oarsman, or a football player, and yet have none of the instincts of the sportsman.

On the other hand, a man may not devote himself to any form of sport at any time, and yet have the unmistakable attributes which stand for sportsmanship.

Be it understood that, shorn of the outward and visible signs of sport, the sportsman is simply a fair-minded, manly-acting, outspoken, courteous gentleman—and I mean gentleman in the sense that implies natural instinct, not clothes and general outward appearance. Many a good sportsman I have known in cowhide boots and with a somewhat limited vocabulary.

Coming to technical definitions, however, there are four attributes essential to sportsmanship—first, sport for sport's sake ; second, fair play ; third, playing the game out ; fourth, courtesy to a worthy adversary.

The sporting spirit implies not only fair play in one's own game, but a desire to promote it in the games of others. It demands that the chances of all be equal ; it would as soon think of shooting a sitting bird as killing ducks in the springtime, or as killing the female of any wild game animal, or as secretly securing the longer sword.

It is the sporting spirit which prompts adventure, makes one's blood tingle with expectancy on facing dangerous big game, and that sends men up and over desperately defended trenches.

It is the moral uplifting which comes from fair play even to the beasts of the forests and the birds of the air. It is the exhilaration of a contest of wits—yours against your quarry's. It is the thrill of honorable contest. It is living.

A Seventy-foot Cup Defender. It has come to pass that a year which provides no contest for the *America's* Cup is written down by the newspapers as an "off-year" in racing. But I am not so sure that in reality "off-years" are not the most satisfactory to the yachtsmen. Certainly, interest is more diversified, and opportunities are afforded for home general development which

are not possible during a season of international racing.

Several things are happening this year to make it exceptional among yachting seasons—notably the establishment of a seventy-foot sloop class—by all odds the best of the large single-stick division.

It has been said that these seventies are to be used in trying out models for the next Cup defender. No doubt the impression is not without foundation, but we should rather that it meant the next defender is to be actually a seventy.

When Sir Thomas Lipton challenged for the *America's* Cup year before last, it was solely out of respect to the wishes of the New York Yacht Club in general, and to the owners of *Defender* in particular, that he named a ninety. Lipton's own preference was for a seventy-footer, but he deferred to the desires of his opponents, with rare sportsmanship.

It would seem, therefore, that in 1901 it should be Lipton's turn, if he again challenges, to choose the size of the challenger, and we sincerely hope his preference still remains for the seventy.

There is nothing in the ninety-foot yacht which cannot be developed in one of twenty feet less water-line length. On the other hand, the ninety is enormously expensive to build, and to sail ; and is utterly useless after the Cup race. The seventy commends itself not only by reason of less initial cost and less expense of running, but because it is a practical racing yacht which may be put in commission annually without having a millionaire owner, and will serve to give us a racing class of big single-stickers.

There is no denying that the real sport of yacht-racing in recent years has been supplied by the small boats, which is perhaps partly attributable to a lack of large ones, and partly to the sport-giving qualities of the smaller racers. Yet with so much capital invested in yachts, it is regrettable from every viewpoint that there should not have been a filling of classes already started. For half a dozen seasons we have had scarcely ever more than a couple of modern boats in any one of the larger classes, and even that showing only in a very few scattered divisions.

The Boer War and the "America's" Cup. Unless England speedily gets the Boer war off her hands, there is strong probability that after all we shall have no *America's* cup race in 1901. The feeling among British yachtsmen is somewhat opposed to arranging for a sporting event of such national significance so long as England is involved in a war that is draining both the country's treasure and its best blood; and Sir Thomas Lipton will very properly respect public sentiment.

Should the end come in South Africa suddenly, as it is very likely to do, and shortly, Sir Thomas's challenge will arrive in due season; but if hostilities are carried beyond the summer, it is doubtful if another challenger will be seen in American waters next year.

No Professionals Need Apply. It is altogether a happy sign that there should be such activity in the building of the small boat, since it is the racer *par excellence*, and the school whence graduates the real Corinthian sailorman. For that very reason there should be a decided distinction on the club prize list between the winning boats handled by amateurs and those sailed by professionals.

Some clubs I note are going so far as to entirely bar small boats sailed by professional skippers, and I unhesitatingly indorse their action. I hope the next step in yachting will be to completely eliminate cash prizes from the small-boat classes, where there is really not the smallest excuse for them.

In the large classes, racing for cash is, to the sportsman's mind, as professionalizing as rowing for cash, or boxing for cash, or competing in any game for dollars. But it is traditional, however, in yachting, where it is claimed the winnings, in a measure, offset the heavy expenses. Still there is no actual need of it, and yacht-racing for money ought to be stopped, as should also trapshooting for a purse by so-called amateurs.

These are inconsistencies which should be straightened out some day in yachting, generally, but they should be instantly put aside from all small-boat racing, and now, in the beginning of the sport, is the time to take the initiative.

The Sport-giving Small Boat. There is good reason for the very considerable recent growth of small-boat racing, and it will continue so long as the sport

is conducted on fair stable rules, and the racing machine pure and simple is not permitted to drive the average owner out of racing existence.

Rule committees have unquestionably exhibited too much fickleness for the good of the sport, which cannot thrive if a new basis is to be put forth annually. Mistakes of this character have been made on Long Island Sound and around Boston, but it looks now as if a final adjustment had been reached.

At all events there is great activity in small-boat designing. From many directions comes news of fleets of raceabouts and knockabouts that are building; while several clubs are fathering one-design classes, which, while not so good, perhaps, as a number of boats built to a given measurement, are yet all indications of the trend of the yachting times. They all proclaim the present popularity of the small boats.

Avoid the Racing Machine. The original knockabout came, if I mistake not, from the Eastern Yacht Club, of Boston, and with no bowsprit and 500 square feet of canvas, was somewhat after the lines of the famous and seaworthy Cape Cod cat. The Seawanhaka-Corinthian Club practically adopted the Eastern type for its one-design class several years ago, but added fifty square feet to the sail area. The raceabout in '98 was an evolution of the knockabout, and added another fifty feet, making 600 in all, as well as a short (thirty inches outboard) bowsprit.

And thus we have the model of to-day, which, if they are wise, yachting legislators will permit to remain as it is, for some time to come.

Above all they must guard jealously against the inroads of the purely racing machine.

The Seawanhaka Club is always exerting its influence in the upbuilding of an amateur sailorman class, and the present season shows no relaxation in this direction, or in the one which points to good general racing as distinguished from that of special types of racing machines.

Canoeing Revival. If an object lesson is needed to convince small-boat legislators of the unwisdom in allowing the racing machine to get the upper hand, it can be furnished by the present condition of canoeing.

Here is a sport than which none better, or more wholesome, is to be had. There has never been a question of professionalism throughout its long history. It is and has always been a game for sportsmen. Yet, for half a dozen years it has languished, because it could not survive the unnatural conditions left by the racing machine.

In plain language, the sliding-seat-bath-tub-cockpit racing machine injured canoe racing, and came very near depriving the sport of all life.

I remember well when the excitement of the first sliding seat swept through the canoeing camps, and found many converts. It was thought to be a great thing; and so it was; but it was the beginning of an evolution which finally produced a racing machine so expensive and so complicated as to eliminate the elements of good sport, and make of racing an absorbing life pursuit.

'Twas the old story told over again; the story that has killed every game in which men engage for sport, rather than to make a business of winning.

There have been endless discussions as to ways and means of restoring life to canoeing. There have been frequent attempts at reform in the matter of racing rules; but nothing has up to now come of it, except a determination on the part of a considerable number of the American Canoeing Association members this season to institute a crusade.

I understand this final move is to be set in motion during the encampment in August, and every sportsman wishes it unqualified success.

There is no doubt that a full attendance, and a stiff backbone, will enable the friends of canoeing to carry through the needed reforms.

College Activity in Lacrosse. Nothing has been more pleasing than the spring activity of lacrosse, one of the very best in all the long list of games. It is exceedingly strange that with such quality to recommend it there should be so little play among college men, and still stranger that the spectacular elements of the game have not attracted spectators to a greater extent. The truth is that, in their respective seasons, baseball and football absorb so much of the time and thought of the athletically inclined as to leave very little room for any other game. At the smaller colleges—athletically

speaking—Johns Hopkins, Stevens, Lehigh, etc.—lacrosse has long had a measure of the popularity it merits, but at the larger universities the game has had only a desultory existence.

This spring there has come unusual, and, it must be acknowledged, unexpected activity. Teams have been placed in the field by Harvard, Cornell, Pennsylvania and Columbia, and there is hope by those especially concerned that this may lead to teams at Yale and Princeton. Thus far Johns Hopkins continues to show the greatest skill.

Nothing better could happen to university sport than that lacrosse should attain general vogue. The bane of American college sport is the concentration of undergraduate endeavor in one or two directions. We need more games to relieve the intensity which now characterizes play on the football and baseball fields. It would be well if we could introduce Association football also, a splendid game from every point of view. At all events, however, let lacrosse, which has finally attained a bare foothold, be encouraged to the very fullest extent. There are few games so excellent for all-round development and skillful manœuvering—and none better—not even the favorite football.

Hope for Fencing. The fencing season, which closed April 29th, with the finals in the championship tournament, has been altogether an unprecedented one—in the number of tourneys; and in the average quality of performance. Yet no credit can be given the Amateur Fencers' League, which is the official head of the sport in America. It is a pity so excellent a game should have had such consistently stupid management.

That fencing exists despite its inefficient guardians indicates its intrinsic merit. Its life has never been altogether free of embarrassment in this country, and at the beginning of the past winter it seemed as if it must finally succumb. Dissolution of the Cleveland A. C. and of the Boston Fencing Club, abandonment of the sport at the Racquet Club, and dependence on a league of no especial initiative, seemed a combination too depressing to survive.

But, contrary to expectations, the season, as I have said, was the best in some years, for which, no doubt, the activity of the colleges is partly responsible.

**Merited
Championship
Honors.**

It was eminently fitting that Fitzhugh Townsend should have been awarded the championship in foils, for his work showed him to be in a class by himself and a really fine blade. There has been some improvement in fencing form within very recent years, and several new candidates have come forward, two of whom, at least—W. D. and C. Lyon—are sure to stand at the top one of these days. W. D. Lyon not only won his way to the championship finals, but secured third place in the foils and first honors in the dueling swords. With the exception of the leaders, however, the general idea of position appears to be as hazy as ever. The majority seem familiar only with the rudiments—straight lunging and a great deal of the *appel*, or floor stamping, which has not been tolerated in the best schools of fence for years.

Then there was the same old rushing together for a single attack, and cessation of work immediately after the one lunge. As for the *riposte*, with the exception of Townsend, who invariably scored, I did not note it employed during the evening.

But the League committee's arrangements were hopelessly bad. To begin with, the events were given no publicity. The rules were arbitrarily changed during the course of the tournament, competitors being permitted to qualify for the finals who had not earned the required percentage of points. Three judges were often allowed instead of five as called for. Out-of-town competitors went away disgusted with the arrangements, and with the local club cliques who considered their own success above the good of the sport.

The dueling sword work was fair, but the sabre contestants showed slight knowledge of the weapon's possibilities, especially in the use of the point. The fencer who was awarded first in this class won only one out of three bouts in the qualifying preliminaries, and yet was allowed to compete in the finals!

This brings to mind the most unsportsmanlike act that has come under my eyes in a long time. Dr. Edward Breck, one of the most consistent supporters fencing has ever had in this country, recently returned to New York from Germany, where for

several years he has lived, and entering the preliminaries of the sabre championships, succeeded in defeating all his opponents, among others Mr. J. L. Erving, the present champion, whom he beat 5-2. Dr. Breck then accepted a friend's offer of a visitor's card to the New York Athletic Club, so that he could get some needed practice before the finals. But the N. Y. A. C. committee—which had a team entered for the fencing—wrote that "Dr. Breck could not have the privileges of the club until after the finals of the championships for which he had qualified"! Needless to say Dr. Breck absented himself from the finals.

And curiously enough this spirit does not appear strange to a New York Athletic Club committee.

**Americans at the
Paris Exposition
Athletic
Hippodrome.**

The appointment by Ferdinand W. Peck, United States Commissioner-General to the Paris Exposition, of A. G. Spalding as director of athletics to the United States Commission, like everything else in connection with the athletic end of this Exposition, is, we fear, belated. Mr. Ferdinand W. Peck, late of Chicago, and at present in Paris, had something like a year in which to make this appointment and to prepare, so far as he could, for America's athletic representation.

A more competent director than Mr. Spalding could scarcely have been chosen, and had he been appointed in season we should expect a successful and properly managed athletic meeting. But the appointment comes so late as to be somewhat embarrassing for Mr. Spalding, and to furnish little confidence in the proper conduct of games that should be the greatest ever held.

Had the French Government allowed Baron Pierre de Coubertin and his Olympian Committee to have full control, as originally intended, we should be content. As it is, under the Exposition Companies' management, we shall view an escape from scandal as the greatest of good luck.

There is such a different atmosphere enveloping these Paris games from that at Athens, during the last Olympian games. The prize list of "objects of art," valued at fifty, ten and five dollars, grates on my nerves, and reminds me of brewery picnic

**An
Offensive
Prize List
and
Sunday
Games.**

games. At world's championships such as these should be, there ought not to be other than a first prize and an honorary medal for the second.

There are so many things about the Paris games that jar us, I hardly know which is the most annoying; but certainly the scheduling of events on Sunday, while in keeping with the management, cannot be accepted by Americans. Sportsmen are deeply gratified by the stand taken by Princeton and Pennsylvania, and if no change of date is made by the Frenchmen, no university teams will be seen in Paris. The Frenchmen will no doubt make the change, as they greatly value the attendance of American athletes. I almost wish they might not make the change, for I am frank enough to say that I view with no little trepidation the outcome, ethically speaking, of this great athletic hippodrome.

I note that one or two papers in New York referring to the Sunday dates in Paris, claim Sunday games to be more or less common in the Western United States; and I cannot refrain from making it a matter of record here, that with a thorough knowledge of the country, I know of no locality where Sunday games are tolerated or patronized by sportsmen.

Muckers, however, hold Sunday games in many localities.

Polo at Home and Abroad. There has been no play thus far this season to suggest improvement over the general form of 1899. It is of course too early to expect any settled team play, and the repeated shifting of men from one club to another seems to argue that it will be some time before excellent work can be expected. The present habit of polo players to change their allegiance according to whim and convenience, is not helping the game any. In my judgment it is doing it distinct harm, not only in retarding the cultivation of team play, which is after all the essential to high-class form, but in checking the development of individual material.

We shall be able to secure a better idea of the season's outlook after the Meadowbrook and Devon tournaments the first days in June.

After all, there is to be no American team at Paris, which is too bad, since there is no doubt that the best four we

could put into the field would to a certainty defeat any but the very top four of England, and I have always believed that we could successfully accomplish even that task. Our best ponies are better for the purposes of the game than the English best; our players are more resourceful, more versatile, and at their top form show just about as strong team play.

It is not unlikely, however, that Mr. Foxhall Keene may gather some Chicago and St. Louis players for a team in scrub play in England, or may himself play on an English team at Paris.

The Growth of Horse Shows. There are, I fancy, few people outside of those directly concerned, who realize how horse shows have multiplied in this country within six years, and what direct influence they have exerted upon the breed of our horses. The first shows in America were really the county fairs, of annual occurrence and importance very generally over the West and, in separated sections, in the South. But the Eastern show began with the inauguration of the National Association in New York, and from this have come the outdoor exhibitions.

From being originally the summer diversion of fashionable people, the open-air show has gained a place second to none in the eyes of both horseman and casual spectator.

The one at Philadelphia was the first of its kind, and remains the most important, but there are others, many of them, entitled to a fair share of the season's honors.

Beginning in the last days of May, the outdoor shows continue with slight interruption well into September, through the Middle Atlantic States; and there is now a movement afoot in the Middle West to combine horse-show features with the trotting meetings. This is no doubt the result of the New England experiment at Brockton, where, for two years, horse show, fair, and trotting have been combined with great success.

Indeed, these shows are increasing to such an extent that one can scarcely keep pace with them. There need be no fear of the automobile lessening interest in the horse—on the contrary, its influence is beneficial, for it will serve the purpose of the mere hack and leave the real horse-lover in full possession of the field.

There is one direction in which American shows can follow an example set by Canadians, with great profit, viz., by establishing a class for horses bred for cavalry purposes. Strangely, this feature has always been ignored by our associations.

Dealers vs. Amateurs. The question most concerning horse-show associations just now, is the status of the professional breeder. For years we have been watching the professional exhibitor, the dealer, gradually absorbing the majority of classes at both the indoor and outdoor shows. This is true also of the National Show in New York.

Now the matter is considerably more serious than the National Association officials appear to regard it. What applies to all kinds of sport applies with equal force to the horse show, to wit: that the amateur and the professional cannot meet and thrive on common ground. One or the other of them must go, and will go sooner or later. It is inevitable. The question therefore is, whose attendance is the more vital to the success of the show, and through it to the development of the breed—the amateur's or the dealer's? If the amateur goes, the horse show will go with him; there can be no doubt of that. The amateur can no more compete with the dealer than the college athlete can compete with the professional runner; what is the pleasure of one is the business of the other.

Moreover, the sporting spirit is lacking in a competition between amateurs and dealers, or among dealers themselves; the quest of dollars is too obvious and destroys the element which makes such events worth while.

The dealer has filled an important place in the upbuilding of horse shows throughout the country, and in the breeding of our horses, just as natural trade competition has bettered and cheapened the product of almost every manufactory in the United States.

We are not unmindful of what the dealer has done; but the time has come now when the interests of all—horses, amateurs, and breeders—demand a line drawn between the amateur and the professional exhibitor.

It is the business of the dealer to find the horses among the breeders, to fit them for exhibition, to sell them, but not to show them.

That should be the pleasure of the dealer's patrons—the amateurs.

The Need of a Real National Body. It is plainly the duty of the National Horse Show Association, which has held pretensions to actual authority, to take up this question and rule upon it definitely. Sportsmen have long wondered why it has failed to act on a question so nearly concerning the interests of horsemen in whose welfare it was organized. There is no doubt the need for a genuine national body is great and I shall expect to see one formed in the coming autumn if the Association holds its present indifferent attitude. There are now so many organizations throughout the country that such a national body to furnish rule and precept is absolutely imperative.

The Philadelphia Association has, I note, wisely taken action on the dealer question, and at its show beginning the 28th of May, professional exhibitors will be barred from the majority of those classes in which carriage and appointments are considered.

This is a good beginning, but it by no means goes far enough.

The Gaited Saddle-horse. Two recent and unconnected happenings in the horse world indicate the great development in American horse-flesh: (1) the repeated efforts of the Saddle-Horse Breeders' Association to establish a recognized breed of saddle-horses, just as there are recognized types of the thoroughbred, the trotter, etc., and (2) the sale of Red Cloud, the champion heavy harness horse of 1898, for ten thousand dollars. Incidentally I may add that Red Cloud is a trotting-bred horse, and came out of the West—Indiana, in fact.

The present question agitating saddle-horse circles is that of gaits, and at the moment trouble seems brewing, because the Association insists that the running walk shall be included among the accomplishments of the gaited animal, and refuses to register any saddle-horse not up to the prescribed standard. This has created much disturbance among dealers having imperfectly gaited horses, which they wish to sell as registered, and, therefore, perfectly gaited saddle-animals, but horsemen must commend the Association's action.

There is no doubt, of course, that if the Association has adopted a stand-

ard for the completely gaited horse, it should refuse a certificate to any not coming up to the requirements. There is also equally no doubt that the running walk is an important feature indeed of the perfectly gaited saddle-horse.

It is just and right and excellent for American breeding that there should be distinctions. At the same time many of us will be able to find acceptable saddle animals which have not all the regular gaits. It is purely a matter of individual choice. But the Association is quite right in its contention, and I hope will adhere to its principles.

International Some good is sure to come
Rowing. of the sports carnival in Paris, for whether or no the American National Association of Amateur Oarsmen succeeds in being represented at the Exposition regatta (Aug. 26), agitation of the subject here has at least created unusual activity in local club rowing.

The wish of the Association is to enter the single and double sculls and four and eight-oared events; and special trial races are proposed over the Speedway course on the Harlem River, New York, after the Association's national regatta (July 19-21), to decide on representatives.

The expense involved in sending the required number of crews will be about five thousand dollars, which it is hoped will be raised by subscription among the clubs of the Association and among oarsmen generally.

My best wishes are with the Association, but I very much fear it is destined to disappointment. Two facts stand in the way of popular subscription: (1) the honor attaching to victory in a French regatta is not sufficiently enticing; (2) trial races on the Harlem River preclude a representative gathering of American oarsmen. If really representative crews are sought, trial waters should be chosen about one thousand miles west of the Atlantic. Despite its classic surroundings, the Harlem has not yet attained the national distinction of the Bowery—that other famous metropolitan thoroughfare.

A Parisian trip would undoubtedly be a pleasing break in the midsummer toil of Association oarsmen, but whether it is worth while in a sporting sense is quite a different question.

Rowing in France is largely professional; there are scarcely a handful of active amateurs, and if the regatta on the Seine is to have the same kind of management as seems likely to be the lot of the Exposition's track games, a sorry confusion of status after the racing is apt to be the result.

A crew or two of the English second class may attend, but the entries are more than likely to be confined to French and Dutch oarsmen.

It is entirely praiseworthy of the Association to seek new fields of conquest, but its purpose would commend itself more to sportsmen were the plan of invasion comfortably within the means of the Association, and its prospective rivals of greater prominence in the world of amateur rowing.

If Association oarsmen really yearn for racing with foreign crews, I suggest an eight be sent to one of the Thames River (English) regattas, where the Henley amateur definition does not obtain, and some very good rowing is to be encountered.

Higher Average This promises to be a
of most encouraging sea-
University Rowing. son in college boating,
because aside from the
greater intelligence apparent in the
coaching—which is tending toward a
common stroke—there is already a noticeably higher average of skill. This is not due, I find on investigation, to exceptional development at a single university, or to the notable quality of a chosen few at any one college, but to general and considerable improvement in oarsmanship.

No college in 1900 will be represented by a crew inferior to that of 1899. All promise to be as good as last year's, and some promise better.

Harvard and Wisconsin are sure to have crews equally strong as in 1899, though perhaps no stronger; Pennsylvania will excel expectations if her eight move more smoothly or swiftly than last year. Indeed, all three will prove exceptional if their veteran eights of 1900 show quite the form and speed of 1899. This is not because of a lessening in interest or material at any of these universities—on the contrary, material is more abundant than ever, and the general quality of rowing higher—but because it is unusual for a crew in its second year to surpass or even entirely

equal its first year's performance. It is exceptional, understand, not impossible.

On the other hand, we are quite sure to see faster crews from Yale and Columbia, positively so from Cornell; and this despite the fact that the boats of all three have a considerable percentage of last year's oarsmen. Indeed, this seems to be a year of an unusual number of veterans.

**Faster Crews at
Yale,
Cornell,
Columbia.**

Cornell could hardly be worse than last year if they tried. The break in the '99 eight will long serve to stamp that crew as notably bad, on the splendid list of good ones which have come from Ithaca. The material this year is no better as a whole than it was last year, but it has not the discordant and embarrassing elements of '99, and it is being tried out on such a survival of the fittest plan as will fail not to disclose the drones or the malcontents. Moreover, there is excellent Freshman material, perhaps good enough to supply the 'varsity with a few substitutes.

At Yale, too, there is fairly certain to be a better crew. Not by any means that the crew of '99 was a poor one. It is rather a fancy with those Yale men who know little of rowing and literally nothing of the rowing circumstances of '99, to soften their disappointment over the defeat of that year, by referring to its crew as especially poor. But last year's Yale crew was not especially poor; it was not poor at all. It was, in point of fact, a good crew; good enough to row the four miles against Harvard in time better than the average winning time at New London; so good, indeed, that had the parts of the stroke fitted together a bit smoother, it would have been an exceptional crew, and forced Harvard to a new record or defeat.

Yale was doing a little experimenting last year—trying to combine the best of its traditional stroke with what had been learned at Henley. The crew was an improvement on that of '98, and undoubtedly valuable lessons were learned, which should bring still better results this year. Indeed, the 'varsity is already showing the effect of the new (and established) policy in its work at New Haven. But although Yale is on the right track, in point of stroke, it will continue at a disadvantage as against Harvard, until it more fully adopts the

club-racing system, which develops Harvard's oarsmen. The plan of trying out 'varsity candidates, now followed at New Haven, is not sufficiently up to date, and must be revised. It made winning crews five years ago, but it will not do so now.

Columbia's stroke will not have the jerks it showed last year, and the crew therefore will be able to get more speed out of the boat in proportion to the energy expended. Indeed, it looks at last as if Columbia had a chance to redeem the poor showing of recent years.

**Excellent Form
at the
Naval Academy.**

The Cadet oarsmen of the U. S. Naval Academy are the first of the season to give substantial evidence of improvement. It is no small feather in their cap that they should defeat the Yale second 'varsity eight by nearly a boat's length in two miles, and in the excellent time of 10:10. The youthful sportsmen of Annapolis and West Point get so little time for practice in their games—and their sporting spirit is so admirable—that their rewards are richly merited and a cause for general rejoicing. It was a very fair crew the Cadets beat, and had been fairly long in training.

A week later the Cadets seemed to have lost some of their "edge," for Pennsylvania's 'varsity beat them, May 12th, over the same course by a length in 10:36, and a little over a second was all the Cadets could beat the Pennsylvania Freshmen in a mile and a half.

**Harvard's
All-round
Track Team.**

No feature of the spring track season more certainly merits support than the dual meetings between natural rivals; it is therefore very pleasing to note the increasing popularity of this class of athletic entertainment. Moreover, it is one of the surest, as it is the best, of methods for bringing out and developing individual material. It tends to the production of a well rounded-out team; is a builder, in other words.

The Harvard-Yale meet at Cambridge, May 12th, proved the advantage of an evenly developed team, for although Yale captured six firsts out of thirteen events, yet Harvard's final winning score was 62½ to Yale's 41½ points. The general average of Harvard's team showed clearly above that of its rival, but though a rather good breeze blew down the sprinting path the

performances were not of a very high order; still some were good.

Harvard won the half-mile (Applegate, 2.02), two-mile (Richardson, 9 57), both hurdles (Hallowell, 15 4-5 and 25 4-5), hammer (Boal, 144.3), high jump (Rice, 6 feet), broad jump (Shirk, 21.6½). Yale won both sprints (Richards, 10 2-5, and Boardman, 22 2-5), quarter (Boardman, 51 3-5), mile (Smith, 4.36 3-5), shot (Beck, 43.5), pole (Johnson, 10.8).

Evidently it is rather well that Oxford-Cambridge-Harvard-Yale did fail to come off. It does not look as if the Americans could have made a contest so interesting as they did last year.

California Athletes in the East. The scores by which they have been defeated in dual meets do not at all represent the excellent work the Californians have been doing. It is a thoroughly good class team—exceptional, however, only in its hammer-thrower, Plaw, who appears to have greater natural ability in his specialty than any of our Eastern men, although on occasions showing less skill. In all other respects—*i. e.*, in sprinting, hurdling, running, and jumping—all the larger Eastern universities have better men.

Yale beat California (May 5), 8½ to 3½, the visitors winning the hundred yards (Cadogan, 10 3-5), hammer (Plaw, 139.3), high jump (Woolsey, 5.8), and tying the broad jump (Broughton, 20.8½). At Princeton (May 12), the Californians lost by the score of 2—10, winning only the shot (Woolsey, 41.11) and the hammer (Plaw, 151.10).

It does not look as if California had a chance for more than one first in the Eastern Intercollegiate Athletic championships, and no certainty of securing even so much. In the Middle Western Intercollegiate championship, however, its score will most likely be more satisfying. Considering their long trip and change of climate, the Californians have acquitted themselves nearer their top home form than would have been expected.

More Pot-hunting in the Middle West. The playing of Miller by Michigan, in minor baseball games, and the running by Chicago of Burroughs and Lord, indicate that the spirit of sport for sport's sake does not yet entirely abide with the leading universities

of the Middle West. It is depressing to realize that the spirit of the amateur seems to be found only where the letter of the law makes it obligatory—or convenient.

Burroughs has been a competing athlete at the University of Chicago for four years; but year before last, as a result of the indignation against Wisconsin for trying to use Maybury and Cochems, Chicago, Michigan, and Illinois withdrew from the Western Intercollegiate Association, and held a meeting of their own at Marshall Field. For this reason Burroughs has not competed in the Western Intercollegiate championships four seasons, and consequently according to the letter of the rule is eligible. In the spirit of the college rules, however, he has competed four years as a representative of Chicago, and is not eligible.

For the same reasons, Miller of Michigan is not entitled to represent his university in any game; and playing him against small colleges, simply to win, is the most offensive type of pot-hunting.

I hear also of a half dozen football men who left Chicago and Wisconsin immediately after the season closed last autumn.

Are we to consider Middle Western university faculties as without truth, or without power?

Western Athletic Championship. Were it not for the presence of the California team, the Western Intercollegiate championship would appear to rest between Chicago and Michigan. But although it seems hardly possible that the Californians can win the championship, as a team from their university did in '95, they are sure to upset the calculations of the Western colleges.

Chicago has a very strong team, as shown several times this spring, especially in the sprints and the middle distances. Its most dependable point-winners are W. A. and Fred. Maloney, Slack, Lord, and Burroughs. The last two are really ineligible, but that appears to be an insignificant circumstance alongside the fact of their being point-winners.

Michigan will be strong in the hurdles, pole vault, hammer, and mile run, and probably most formidable of the other Western teams.

Notre Dame, which took the second place in 1899, is much weakened by the

loss of its star point-winner—J. Fred Powers. Is it not notable what migratory dispositions these star point-winners appear to have.

Wisconsin seems to have slight prospect of bettering its last year's position, which was fourth; its only sure point-winner is in an event which should be banished from the programme—the mile walk.

Chicago won the honors last year, and seems most likely to do so in 1900.

Lower Ethical Standard at Yale. Sportsmen of whatever college affiliations sincerely hope that the license for participation in sports which it is reported the Sheffield Scientific School faculty has granted conditioned students, will be revoked by the university faculty. It would be a remarkable spectacle indeed if Yale, so long one of the most alert in safe-guarding college athletic morals, should now open for the athletically dissolute an avenue of escape which every other university faculty is closing hard and fast.

There is scarcely a faculty with any regard for the athletic morale of its undergraduates, which does not bar from its teams students having even one condition. Therefore it seems highly incredible that Yale should be letting down the bars while every one else is putting them up even higher.

If it is true, it is most discreditable.

Certainly Sheffield School athletes can have no privileges not allowed other Yale students. I cannot believe President Hadley will permit such a lowering of Yale's standard.

Expel Also the University. Sportsmen are very much gratified by the action of the Intercollegiate Athletic Association in sustaining the protest of Princeton against A. F. Duffey, of Georgetown. There is no question of the righteousness of Princeton's protest. Duffey should not be permitted to run at either the Intercollegiate championships or any other set of college games.

But why should not Georgetown, the real culprit, suffer, too? Here is a college which has for years been notorious in its disregard of the ethics of university sport. By hook and by crook it has acquired track athletes and baseball players; it has virtually made professionals of boys by "scholarships" and other means best known to the purveyors of dishonest athletics. Wefers, pro-

fessional to the core, was one shining example, and now here is another lad started in the same direction. It is shameful.

Yet Princeton, Yale, and Pennsylvania encourage Georgetown in its course by arranging games with its teams.

Athletic ostracism would soon cleanse Georgetown. Meantime it ought to be expelled from the Intercollegiate Athletic Association.

National Golf Handicaps. It is very difficult, practically impossible, to provide handicaps which will please every one; but on the whole, the figures recently issued by the Metropolitan Association's committee, are as satisfactory as could be. The task of fairly rating players is so heavy that the success which has attended this committee is entirely commendable. Low-score golfers are comparatively simple to classify, but the form of the second class changes so frequently, and so completely, as to make them absolutely undependable.

There is one suggestion, however, I wish to offer, that it seems to me will give these handicaps greater permanency and wider value. The Metropolitan committee undoubtedly fixed upon its official rating, after comparing the handicap lists of the forty odd clubs in the Association. Now, although that rating is compiled primarily for the Metropolitan Association, yet it really attains to national significance, because (1) of its being the only compilation of the kind in the country, and (2) because of the character of its sponsors. Therefore, why should it not be revised from time to time during the year; say twice, in June and again in September, to keep pace with the revision of club handicaps?

Such a system could readily be adopted, without excessive labor, by arranging for club committees to forward every change in their handicaps, and by recording these as they come in. The collection of such data would be of incalculable service to the handicapping committee and of permanent and great value to American golf.

Development of the Home-bred Game. Study of the 1900 handicaps is as interesting as it is suggestive of the progress of the native golfers. The full list shows about 1,000 players handicapped from scratch to seven-

teen strokes. Those on the list rated at ten or under number 281, and are eligible to start in the Metropolitan championship. Last year the list contained about 700 players, of whom 174 were eligible to the qualifying round. No more accurate idea of the relative strength of the best men can be obtained than by the list of those rated at four or under.

1899—F. S. Douglas, 0; H. M. Harriman, 2; J. Reid, Jr., 2; W. J. Travis, 2; L. B. Bayard, Jr., 3; W. B. Cutting, Jr., 3; H. B. Hollins, Jr., 3; F. P. Keene, 3; F. W. Menzies, 3; A. M. Robbins, 3; E. C. Rushmore, 3; J. A. Stillman, 3; R. Talbot, 3; H. P. Toler, 3; J. A. Tyng, 3; J. I. Blair, Jr., 4; G. C. Clark, Jr., 4; L. Livingston, Jr., 4; Jasper Lynch, 4; T. M. Robertson, 4; W. H. Sands, 4.

1900—F. S. Douglas, 0; H. M. Harriman, 0; W. J. Travis, 0; C. M. Hamilton, 2; R. C. Watson, Jr., 2; W. B. Cutting, Jr., 3; C. Griswold, Jr., 3; H. B. Hollins, Jr., 3; P. R. Pyne, 3; John Reid, Jr., 3; J. Stuart, 3; L. P. Bayard, Jr., 4; R. Brooks, 4; D. Chauncey, 4; G. C. Clark, 4; H. A. Colby, 4; D. Emmet, 4; J. S. Gillespie, 4; F. P. Keene, 4; F. P. Kimball, 4; Jasper Lynch, 4; F. W. Menzies, 4; A. L. Norris, 4; A. M. Robbins, 4; T. M. Robertson, 4; E. C. Rushmore, 4; J. A. Stillman, 4; R. Talbot, 4; R. Terry, Jr., 4; H. P. Toler, 4; J. A. Tyng, 4.

Comparison of the '99 list with that of this year is convincing evidence of the growth of skill, and eminently satisfying in its classification of two native-bred players with Findlay Douglas, who comes from the home of the game, St. Andrews, and was United States champion in '98.

Spring Golfing Form. From present indications the Metropolitan and National championship semi-final rounds will see such well-matched survivors and such quality of play as no tournament in America has yet disclosed. The opening play of 1900 is remarkable in its frequent exhibition of form that two years ago was shown by only a very few men at the top of the class then first.

Although school-boy golfers are notably uncertain, they are sure to have an effect on the results in the early rounds, while the college players must be reckoned upon in the semi-finals.

Travis, Robertson, Cheney, Byers, Pyne 2d, Hitchcock, Jun., Stuart, Hollins, Reid, Jun., Hamilton, Lynch, are all playing better than at this time last year. Watson seems not yet to have settled. The champion, Mr. Harriman, always slow in attaining his form, is giving signs of improvement. C. B.

Macdonald, now virtually a New York resident, is coming into his game.

It was unfortunate Harvard and Pennsylvania were unrepresented at Lawrence Harbor, May 12th, since, in the practical abandonment of the official intercollegiate championship the tournament became really the only occasion of a general meeting of university golfers, as such, this season.

It was a medal play team (four) match over thirty-six holes, and Yale won with a score of 754, to Princeton's 763 and Columbia's 820. The tournament was important too in showing the form of several who are apt to make an impression in later Association match play. Percy R. Pyne, 2d, Princeton, the present intercollegiate champion, played a consistently strong game and showed a card of 185; but E. M. Byers, Yale, proved somewhat of a surprise and made the best record of the day with 179, which is a new record for the links. J. Stuart, Princeton, also showed a strong game, finishing one stroke short of Pyne.

The Interscholastic Association tournament was also replete with work of exceptional interest, especially as showing the kind of game these boys are learning to play. Needless to say, it is a kind which in due season will still further raise the American standard, and meanwhile some of the youngsters are apt to cut something of a figure in national tournaments. H. B. Hollins, Jun., won out by a comfortable score, but there are others not much below him.

How Golf Clubs Can Help the Association. As the time for the Amateur Championship at Garden City approaches, speculation is rife as to the probable number of entries. The National Association may not limit them, but the clubs can materially aid in their restriction. And it behooves all who are interested in the sport and the success of the championship to influence directly and indirectly all players from entering who are not of the very first rank.

It is possible the entries will be so large as to make the championship difficult of management, and unsatisfactory to the contestants in general. The clubs themselves can do much in eliminating the poorer players by confining the entries from their clubs to only the best.

It is really the duty of all golfers to help in the elimination of the average player, who feels it an honor to enter the National Championship, and does not realize what a nuisance he is.

Golf clubs, I note, are more generally identifying themselves with the National Association, in accordance with the suggestion made by the President at the annual meeting. There has been a steady increase since that meeting, one club joining from as distant a place as California.

I strongly commend this. First, because the Association has done, and is doing, such good work for the sport that it would seem to be the duty of all properly organized clubs to give it the support their membership would signify, and, second, because the Association is the most defendable safeguard of golfing morals.

There are many clubs in the country which have not allied themselves with the National Association, but which none the less are indebted to it for the protection and management of the sport. Members of such clubs should see the propriety of doing their share toward strengthening the national body.

Lawn-tennis It is very pleasing to know that a game so thoroughly enjoyable and sport-giving as lawn-tennis is not to be dependent for its season's life on the indulgence of golfers or the coming of a few English experts. The Association, never very active, has sent out its annual schedule of tournaments, which number nearly as many as usual, and there is quite a chance that Larned and even R. D. Wrenn may return to the game.

But it is not in respect to public tournaments that a satisfactory view of the approaching season is presented, so much as in the general reawakening of interest in the game. Private courts, neglected in the last two seasons for golf, are returning to favor, and the sale of tennis paraphernalia is, I am told, greatly in excess of any year in several.

There is no doubt concerning the quality of the game—it has always been one of the very best, and will remain so, despite others that perhaps temporarily draw on its devotees.

Excellent College Judging from the play of the Eastern college nines during May, the early June

games—the real opening of the college baseball season—will be more closely contested than they were last season. A statement which will apply particularly to the Harvard-Princeton series. There appears to be considerable improvement at all the colleges in base-running and infield work. More steadiness in the box than in the early play of '99 is also noticeable. The batting, however, seems to average about the same.

Brown thus far has not only made the best general showing in the matter of scores, but a really notable record as well. It has beaten Princeton 6-1, Harvard 3-0 (in the very best game of the month), Yale 7-6, and lost to Yale 1-5, and to Wesleyan 1-11. Without belittling the victory of Wesleyan's nine, who have done, and seem capable of doing, excellent work, it must be said that the absence of Brown's best pitcher, Washburn, largely explains the defeat. Indeed, the dependence placed upon Washburn is the weak feature of the Brown team, which seems too often to go to pieces when he is not in the box.

In fielding and timely hitting, Yale has made perhaps the best showing, and bids fair to redeem last season's unsatisfactory ending.

Princeton is doing the best battery work, and hitting the ball very hard, but, like most hard-hitting teams, is somewhat uncertain. Its best games were a 12-4 victory over Georgetown, and an 11-7 defeat of Cornell. Both games showed too many errors, however—a tendency to which the 1900 Princeton nine is too prone.

Harvard has been doing some very clean work, making fewer errors than any other of the large teams, though hitting the ball less frequently and with less force. It appears very difficult to get a hard-hitting Harvard team. But the Crimson's showing is very encouraging. True, it has had an easier schedule, barring the Brown game, than the others, but none the less it gives indications of rounding into a sharp and smooth-playing, evenly developed team.

Pennsylvania and Cornell appear about evenly matched, each having won a game from the other. Neither is so strong as the others discussed, but both give evidence of having material capable of higher development.

YACHTING.

THE 1900 OUTLOOK.

ALTHOUGH the general public may feel a lessened interest in yachting this year because there is to be no contest for the *America's Cup*, the average yachtsman views the situation with complacency. The usual club regattas are overshadowed during an international year, and races fall flat unless cup defenders can be induced to compete in the events. An "off year" in the sport, as it is popularly regarded, is not without its compensations to the enthusiastic devotee.

The season from many points of view promises to be considerably above the average in interest. The prevailing prosperity insures the fitting out of a large fleet. There is a goodly number of new craft, both steam and sail, although the steamers do not compare either in number or importance with the product of last year, when the shipyards were kept busy supplying fast pleasure craft to replace those bought by the Government for the war.

Perhaps the most significant sign of the times is the large number of knockabouts and raceabouts, most of them built with some few pretensions in the way of accommodation, but all with a view to racing. There could be no better school for young yachtsmen than these boats, and their existence is a sign that Corinthianism is growing and flourishing.

The clubs also, because of the financial situation, are in a position to offer more attractive inducements than usual in valuable prizes to be sailed for, and, judging from the programmes already completed, there is excellent sport ahead.

THE New York Yacht Club prides itself as not being a "racing organization," but for all that no club has aroused a keener spirit of competition in the past. The annual squadron cruise is a series of spirited regattas from start to finish, in which every yacht in each class has a chance for a prize in either racing or cruising trim.

The annual regatta will be sailed on June 14th in New York Bay. Then will come an innovation—the race for the Glen Cove cups to be sailed on the Sound on June 19th. Then another surprise in the shape of the "Newport series," off Newport, on July 12th, 13th and 14th. Next will occur the great yachting event of the year, the fifty-fifth annual cruise, Glen Cove being the rendezvous. The flag officers will offer cups for special races as usual, and the Astor cups and the wind-up cups will be sailed for off Newport as in the past. The luck

of the club on the Sound has never been good, lack of wind having spoiled many a fine contest.

These races on the Sound have been arranged for the benefit of the members of the club and their friends who are not yacht owners and who have few opportunities of seeing the squadron in all its pride.

The Newport series in July should prove attractive, because by that time the Herreshoff 70-footers should be in fine racing fettle, and besides, one can usually depend upon a good sou'wester in that month off Brenton's Reef. It is only "Larchmont luck" that can command a breeze on the Sound at almost any time.

THE Larchmont Yacht Club has made arrangements for a brilliant season, as is customary with this thoroughly sportsmanlike body, whose enterprise and liberality seem to have no bounds. Its good fortune has become almost proverbial so far as wind-compelling power is concerned. That its luck may still continue, in spite of the club's present flagship being a steamer, is the fervent hope of its friends. Some superstitious members are fearful because old traditions have been violated in this respect and canvas is superseded by steam.

The season's racing will begin on June 16th with the spring regatta open to all classes. The annual regatta is scheduled for July 4th. The race week is from July 21st to 28th inclusive. These events should attract many entries and afford capital sport. The season will not close until September 8th.

The club has always had the knack of inducing crack craft to compete in its races, the method used being the offering of prizes worth winning. For instance, *Columbia* and *Defender* raced off Larchmont last year. The new 70-footers will be drawn thither this year by the magnetic attraction of valuable trophies. The 21-foot raceabouts will also be invited to take part in a special series of races. These two classes are in some respects the most interesting of the year, and the Larchmont Yacht Club deserves credit for encouraging them.

THE Seawanhaka Corinthian Yacht Club has arranged for several interesting features during the season. The club knockabouts, from a racing standpoint, may not have been highly successful, but they are capital boats in which to learn. The production of amateur tars has ever been the aim of the club. Its classes in seamanship and navigation in the winter have effected their purpose. The good work is to go on this summer. The Corinthian list, which

originated with Commodore Center, has been revived, and the youngsters of the club who desire to serve as seamen aboard racing yachts, while sailing for prizes, are invited to sign the roll. They will be detailed for service afloat, and will have first-rate opportunities of learning the practical art of yacht-racing. This is an excellent plan.

THE Atlantic Yacht Club will begin its season on Memorial Day, and will offer its usual good things in the way of prizes from its opening to its wind-up. The officers are making plans for an exceptionally interesting cruise, the efforts to abolish this old-time feature and establish in its stead an Atlantic race week not having met with strong enough support.

ALL the clubs enrolled in the Yacht Racing Association of Long Island Sound are prospering, and the schedule of their racing fixtures, extending from May to September, shows what has been accomplished in the way of avoiding conflicting dates.

AT present there is no reason to believe that *Columbia* or *Defender* will be put into commission this season. There seems no inducement for them to come out of winter quarters. *Vigilant*, as flagship of the Seawanhakas, and the old *Volunteer*, will probably be the only cup defenders in evidence.

THE four one-design 70-footers, with their costly outfit and 20-knot steam tenders, which have been described in this magazine, will sail in a class by themselves. The Fife cutter, *Isolde*, bought by Commodore Hoyt, and the Watson cutter, *Astrild*, bought by the Messrs. Hanan, will not be large enough to compete in their company. They will sail against each other, and also against *Queen Mab*, imported many years ago by Mr. Percy Chubb, the present Commodore of the Seawanhaka Club and owner of *Vigilant*.

It will be quite interesting to see how much Watson has improved on the *Queen Mab*, his most successful 40-rater, and how *Isolde*, originally a 40-rater, but now in the 65-foot linear rating class, will compare with *Astrild* in American waters. But the most valuable experiment will be to test the speed of the two newly bought boats with that of the Herreshoff 70-footers in a steady breeze. That would furnish data of value and enlightenment. *Isolde*, built for Mr. Peter Donaldson, and sailed by Hogarth, late of *Shamrock*, won more prizes than any other boat in her class. Both *Astrild* and *Isolde* will sail to New York under snug rig.

THE cutters *Sycc* and *Kestrel*, in class K, 43 to 51 feet racing length, will be opposed by three new boats, two of which Herreshoff

has built for J. Cord Meyer and Oliver Ames. Thomas Webber, of New Rochelle, has launched another for J. D. Baird. In class N, 25 to 30 feet, the fast catboats, *Windora*, *Kit*, and *Dot* will sail under sloop rig. They will compete with such well-known winners as *Oiseau*, *Alerion*, *Marguerite* and *Momo*. How they will conduct themselves in their new muslin remains to be seen. According to all the theories of naval architects they should sail slower than they did when all their power was concentrated in one sail.

SCHOONER racing does not promise to be especially brisk, except in the case of those old rivals, *Quissetta* and *Amorita*, which will renew their contests. Both vessels have been hauled out for alterations, *Amorita* having been considerably lightened by judicious clipping of her steel bulwarks, etc., while *Quissetta* will come out with a deeper fin and more duck. *Colonia* will be too busily occupied as a flagship for extensive racing. Besides, she has no real competitor in her class, now that *Emerald* has been cut down and is used practically as a house boat.

The old schooners are being converted rapidly into auxiliary craft, motors of some kind being affixed to them; already they make a long list. Their hulls were soundly put together in the first place. They are thoroughly seaworthy and moderately fast. They have good accommodations, can be bought cheap, and make fairly comfortable cruisers. Many of them that once were famous will be seen this year.

ON the Great Lakes, judging from all reports, sport should be good. The White Bear Yacht Club has entered into a plain and sensible agreement with the Royal St. Lawrence Yacht Club to govern the match for the Seawanhaka International Challenge Cup this year. There seems no cause for the customary bickerings which have occurred on the former occasions when the St. Lawrence and the Seawanhaka Clubs were fighting for the trophy. The preliminary nagging that took place between the organizations and the subsequent bickerings after the races ended were unworthy the dignity of two great clubs.

The White Bears may be able to get along better with the Canadians. They are level-headed and thoroughly sportsmanlike—two great and desirable characteristics, but alas! quite rare. Under the agreement the "freak" type of craft may not be so prominently exploited as in the past. If this should prove true, and the windy war of words be also abolished, yachtsmen will gladly welcome the change.

SEEKING A CUP DEFENDER MODEL.

ASIDE from the designing and construction of the actual defenders of the *America's* cup the most interesting event in the history of American yachting, in recent years, is the advent of what the newspapers call the new seventies—*Mineola*, belonging to Vice-Commodore August Belmont; *Virginia*, belonging to Mr. W. K. Vanderbilt; *Rainbow*, belonging to Mr. Cornelius Vanderbilt, and a fourth, unnamed at this writing, belonging to Mr. Harry Payne Whitney. So far as general public interest in yachting is concerned this may be called an off-year; there is no international race on the season's programme. Nevertheless the fact is that the work of preparation for defending the *America's* cup in 1901 was actually taken in hand when Captain "Nat" Herreshoff began laying down the lines of these seventy-foot racers.

Since British designers began building cutters with the especial view of winning the *America's* cup—and that is to say from *Thistle* to *Shamrock*—they have been just about one year behind the designers of the defenders. *Shamrock* was a very good match for *Defender*, although many of us believe that *Defender* could beat her four out of seven races, especially if the Bay Shore skipper stood at the wheel. The last *Valkyrie* was probably a little better than *Vigilant*.

Now since *Shamrock* was blighted by the frosts of last autumn Fife has been studying the problem presented by that shoulder on her bow, the weight of her quarters, and the rigging that was not quite strong enough to permit her to swing her cloud-obscuring topsails to the yachting breezes. Meantime Watson has had in mind the lines of all the yachts he ever designed. He has been comparing them with the lines of *Shamrock* and what he supposes are the lines of *Defender* and *Columbia*. We all know Watson, and we are entirely confident that he will turn out a ship that will leave *Shamrock* "like she was to an anchor." Every yachtsman looks for a new challenger that will be from three, perhaps five, to twelve minutes faster (according to the wind) over a thirty-mile course, than *Shamrock* was. She is even likely to beat *Shamrock* by that time in spite of all the improvements Fife may make in her. We shall need a ship and a man to sail her, in 1901.

But because of the building of the four seventy-footers the ship seems now assured. It is even safe to prophesy that the ship absolutely is assured. According to the newspapers the new seventy-footers are all built to one design, but that statement is only approximately true.

In general features they are alike, but, looking ahead to the yacht that he must build for next year's contest, Herreshoff has made each of these four yachts an experiment. Each has an individuality of its own. He had new ideas and he has tried them on the dogs, so to speak.

Nor is that all. In building *Altair* for Mr. Cord Meyer, Jr., and the *Sirocco* for Mr. F. Lathrop Ames, both of the fifty-one-foot class, the Bristol sharp has had still further opportunities for experimenting. Of course a fifty-one-foot boat is about the limit of size for experimenting with an idea that is intended for use in a giant ninety-footer, but it is still within the limit. In short, because of the enterprise and patriotism of the yachtsmen named, Captain Herreshoff has had six magnificent boats to build as experiments, and in the races that are now in hand his new ideas will be thoroughly tried out. When the defender for 1901 is to be built, Mr. Herreshoff will have learned from experience not only what new lines to adopt but what new peculiarities in mechanical construction are available.

Meantime Watson and Fife are merely laying down their new ideas in the model loft, and will try them out only in the hull that is to compete for the cup. Their challenger will be an experiment in the sense that our new seventy-footers are now experiments; it will contain new and untried ideas. The defender will contain the well-tried ideas from this year's work. It is safe to say that no accurate detailed description of these new seventy-footers will be published; but because their races will be, practically, preliminary work for the defender of 1901 this season is the most interesting off-year in the history of the New York Yacht Club.

One would not forget what the importation of the famous *Clara* did for American yachting. The little cutter was a revelation. And yet when we consider the vast superiority of the American ship in these days, we cannot help wondering what was the motive for importing *Astrild* and *Isolde*. This is not to give them a cold welcome, but merely to emphasize the fact that a desire for the best of a class is never the motive when a foreign ship is purchased by an American yachtsman.

The *Yachtsman* says *Isolde* "may cause our cousins to become more reconciled to the bulldog appearance noticeable in the *Shamrock*." It may be so, but we cannot yet believe it. A bulldog model that carries acres of canvas has been known to win in the smallest classes on this side of the water. A couple of years ago there was a scow (at least she was not far from the

model of a scow) that swept clear the waters about Boston. But even should *Isolde* be a winner in her class it would not prove the model of the bulldog desirable save for small vessels. Anyway, it is certain that the character of the whole American nation must be changed before the *Isolde* or the *Shamrock* as the bulldog model can be admired here. And we think the British nation must be changed not a little before such a model as *Columbia* would be wholly satisfactory to them. The racers that met off Sandy Hook last year, were in many ways illustrative of national characteristics, but in no way more so than in the lines of the hulls.

AN interesting small racer afloat this year is the sloop *Rochelle*, built by Mr. L. D. Huntington, Jr., for Mr. Edward Kelly. *Rochelle* is 42 feet 6 inches over all, 24 feet on the water-line, 8 feet 4 inches beam, and has a draught of 4 feet 6 inches. She spreads 848 feet of canvas. She is built of oak, strapped and bolted with bronze, and carries a lead bulb keel. *Rochelle* is especially interesting from two points of view: Mr. Kelly will sail her himself; she is of the class that produces capable seamen. And if she does as well as her owner hopes she will do, he will take her to Europe and have a try with the boats of her class in British waters.

IT is not a little remarkable that so few of our yachtsmen have ventured across the big water in search of cups. In speaking of this fact the *Yachting World* remarked some time ago: "Since the *Vigilant* raced in these waters our American friends have not shown any great anxiety to take part in the racing on this side, and it seems now as if the whole onus of continuing the sport on an international footing was to rest with us so long as they hold possession of the principal trophy." That is true and it is sorrowful. But it is still more remarkable that the British yachtsmen never come here for a race save only when in search of the *America's* cup.

AMENTION of the New York Yacht Club in any American gathering immediately turns the conversation to the international yacht races. The patriotism of the club is its best known characteristic, but there is one feature of the new clubhouse that will inspire the bookman as well as the sailor. The club will have, within a very brief time what I suppose to be the best nautical library in the United States. Practically speaking, the library is new. Mr. Theodore C. Zerega is the Chairman of the Library Committee. Among the acquisitions of the past year are such rare finds as the "Voyage of the Slav-

ers St. John and Arms of Amsterdam," of which but 100 copies were printed in the first place, and several of the Hakluyt voyages.

IN NEW ENGLAND WATERS.

UNLESS all signs fail, the Massachusetts Bay yachtsmen will have a busy and successful season. There is hardly a club from Cape Cod to Cape Ann that has not named racing dates, and many have laid out specially good programmes.

The Yacht Racing Association of Massachusetts, to which most of the clubs belong, has a fine schedule of open races for its championship pennants, and will begin its season May 30th, Memorial Day, and close it the second week in September. Many new boats have been built for established classes during the winter and spring, and many of the prize-winners of last season will again be in commission, so that neither racers nor the opportunity for racing will be lacking.

THERE is but one cloud in the otherwise bright prospect for a successful season; the four Hanley boats built for the Y. R. A. cabin 25-foot class have been declared by the Association's executive committee as not conforming to class restrictions, and hence not eligible to race. New and old there were nearly a dozen boats for this class, but the fleet will now be split up and the interest in that particular class correspondingly lessened.

Concisely stated, the Hanley boats are ruled out because, under the committee's interpretation of the rules, they lack three inches of the required depth of body below the water-line. Hanley claims they were built under a fair interpretation of the rules, and that they are the type and style of cabin-boats that the restrictions are intended to promote. In the latter contention he is certainly right, for the owners have accepted their boats, and will race together wherever they may find a chance.

The Y. R. A. has declined to make a special class for them, but there is no doubt that individual clubs will give them plenty of racing, so that the cloud upon the season's prospect may not be so serious as at one time threatened.

These Hanley 25-footers belong to J. Fred Brown, Charles Hayden, W. F. Bache, and Edwin Clapp. They are 40ft. over all, 11ft. 8in. beam, and 2ft. draft, and carry 1,250 sq. ft. of sail in jib and mainsail rig, and 2,000 pounds of ballast. They are very much alike in model, but differ a little in their sail plans. They show the flat floors, hard bilges, and long sides to sail on when heeled that have marked the best Hanley models, and will undoubtedly prove fast.

CROWNINSHIELD has designed two boats in the class for F. Wright Fabyan and R. T. Paine, 2d. They are keel boats, 39 feet 7 inches over all, 9 feet 6 inches beam, and 6 feet 6 inches draft, with 5,500 pounds of lead, and 950 square feet of sail. They are practically an enlargement of the designer's successful raceabout, *Pirate*, and should be fast. Another new boat in the class is *Early Dawn*, built by Shiverick, at Kingston, for Vice-Commodore J. E. Doherty, of the Columbia Yacht Club. She is a centerboard of much the same style as the Hanley boat. Vice-Commodore Walter Burgess, of the Boston Yacht Club, may be found in this class with his new yawl, *Clarette*. She was designed to sail in the 21-foot cabin class at seven-eighths of her length; however, she is eligible to the 25-foot class, with a jib-and-mainsail rig.

As in other seasons, the 21-foot raceabout and knockabout classes promise good sport. The racing of these classes has, by agreement among the owners, been practically restricted to Marblehead, but here the Corinthian and Burgess Clubs offer the racing men all the dates they want; so that there is rarely a Saturday afternoon during the season that does not see a race.

The season in the raceabout class will be notable this year because of the appearance, for the first time, of a strictly fin-keel boat with metal fin and bulb of lead at the bottom. The type has heretofore been strictly barred, although the boats have, in shape, very closely approached it, but it is now let in under a change in the restrictions as made by the Knockabout Association of Massachusetts. The old rules required 3,500 pounds of outside ballast. Now they require only that the total displacement or weight of the boat be not less than 5,900 pounds. The old restrictions on construction are retained, so that while a builder must have as strong a boat as before, he may nevertheless have a little less outside ballast if he so desires. This is where the chance for a fin keel comes in.

THE man to try the experiment is C. H. W. Foster, one of Boston's wealthiest as well as most enthusiastic amateurs, and Crowninshield has designed him a boat 31 feet 6 inches over all, 7 feet 9 inches beam, and 5 feet 6 inches draft. The fin is of $\frac{5}{8}$ inch Tobin bronze and is 4 feet long. The cigar-shaped bulb of lead at the bottom is 5 feet 6 inches long and weighs 2,950 pounds. It projects beyond the fin at its after end, but is flush with it forward. In model the boat shows a little more beam, harder bilge, and flatter floor than the latest

raceabout designs, but is a very clean model at that. She will have to meet another Crowninshield design, an improvement on last year's *Pirate*, and likewise for her designer's own use. These are the most important additions to the class.

THE knockabouts proper—the 500 square feet of sail division of this class as distinguished from the 600 square feet of sail raceabouts—have always furnished good sport under the system of handicaps made by the Corinthian and Burgess Clubs, and this season will be no exception. New and old boats race together with satisfactory results. Except in the matter of sail, the restrictions for the two classes are the same. Designer John R. Purdon has taken advantage of this in *Opitsah II.*, designed for Sumner Foster, and has given her only about 3,000 pounds of outside lead, putting the rest of the weight into the hull. The boat should, therefore, be better than the old boats in a light air, while still being sufficiently stiff in a breeze, for all the 3,500-pound boats are admittedly too stiff for racing.

A FEATURE of the season will be the race for the Quincy Yacht Club's \$500 sterling silver cup for 21-footers. Two challenges have been received, and two new boats are now building. The cup will be defended by Henry M. Faxon's *Hostess*, last year's successful defender. In model she is an extreme development of the scow type, and the challengers are trying to beat her by going her one better in the matter of power and sail. The first challenge was from A. Henry Higginson, through the Manchester Yacht Club, with *Lookout*, and the second from John S. Lawrence, through the Harvard Yacht Club, with *Tashmoo*. "Slabs" are what the yachtsmen call these boats, and they merit the term, for with hulls 40 feet long, 12 feet wide, and 2 feet in depth, they draw only 5 inches of water, and are almost as broad across the bow and stern as they are amidships. Their sides are almost straight, quite so in *Tashmoo*, and they are very lightly built, depending on longitudinal truss work for stiffness. *Tashmoo* is to experiment with a lee-board on each side, instead of the usual center-board. The new boats carry 1,300 square feet of sail, and the *Hostess* 1,200 square feet. They are slow until they begin to heel, when their increasing length and decreasing beam enable them to slide along at a great pace.

The first race for the Quincy cup is scheduled for Monday, July 16th, and the series will be continued on following days until one boat shall have won three races.

THE ROD.

WHERE TO FISH.

AND now begins a truly joyous season for those who rightly understand the gentle art. It may be all very fine to expatiate upon the charms of the first few days of the trout season, but the very cream of the sport upon our best trout and bass waters comes with the first days of the leafy month.

Trout fishing at the opening of the season in near-by waters was about up to the usual average, but such sport only serves to whet the appetite for the later "fishin' as is fishin'" of our Northeastern States and the justly celebrated wilds of the Canadian provinces.

Those who have tested the streams of Pennsylvania and the Adirondacks know that capital fishing is to be had in them, and that the trip going and returning can be made by night. This is highly important to busy men who can at best spare only a few days now and then for sport, for it practically means that all the daylight of a brief holiday may be utilized to the best advantage.

As a rule, the farther one goes from beaten paths of travel, the better the sport; hence the remoter corners of the Adirondacks offer the best sport within easy reach of New York.

By the same reasoning many parts of Maine are better than the Empire State, and, quite naturally, the wilds of New Brunswick, Quebec, and Northern Ontario offer the finest trout-fishing now available. The Moosehead and Rangeley regions of Maine, like the best of the Canadian territory, are comparatively late, owing to climatic conditions, but the early part of their seasons is unsurpassed. For all of these the angler should time his arrival as soon as possible after the snow-water has left the streams.

CASTING BY THE NOVICE.

IT is very difficult to teach a novice how to cast an artificial fly. The English language, corduroyed with diagrams, for over a century has often failed, and the tyro's best course is to watch and imitate his more experienced companion. If nature has intended him for a fly-caster, his first attempt, after several hours of careful study of the old angler's methods, will show that he has caught the true form of handling a fly-rod, or it will develop a crude and bungling cast, which, on rough water, may serve to lure a fish, but disturb to desperation every trout in a placid pool.

The style acquired in the beginner's first days will probably hang to him all the years of his angling life. We have seen many old anglers really ignorant of the first principles of the art, yet cast eighty to ninety feet over the water when on an outing or over the grass for dis-

play. They would swing their forward cast of flies outward a long distance, but apparently knew not that a gentle spring of the rod is necessary to obtain delicacy and accuracy, two qualities in fly-casting essential to success in trout fishing. Be careful, then, in your inexperience and haste, not to follow your own lines when fishing for trout. "Make haste slowly" is a good proverb for your guidance, so do not think yourself efficient because you have caught, by one of your awkward casts, an unwary troutlet, which seeing you plainly, knee-deep in a pool, probably mistook you for a harmless bovine from the adjacent meadow, taking its noonday rest in the cold waters of the brook.

Watch your mentor as he wades carefully down-stream. Note how he slides, rather than walks, lifting his feet only when obstructions meet them. See how carefully he takes advantage of all openings in the trees on the banks to make a longer cast than usual, and observe where his flies alight upon the water—here a pool, and there a rift on the lip of an eddy behind a current-stopping log, under the bank where the stream has undermined it; and possibly the end fly falls gently upon an overhanging bush, and a slight twitch of the rod-tip causes it to fall, as an unlucky insect sometimes does, upon the still water of a miniature pool, to be gobbled up by the watchful trout. Watch your mentor as he approaches the pool at the lower end of a projecting sand-bar, or that likely rift below the quiet water from which he has just taken a pounder or thereabouts.

Above all, study his method of lifting his back cast on a line above his shoulders, and how he springs (not swings) his rod in the forward cast so delicately and effectively that the end fly falls fluttering upon the water. And do not forget to watch him when, at certain stretches of the stream where a pool is reached, he gingerly steps from the brook, goes around to the foot of the quiet water, and fishes with care and delicacy to the head of the pool, spotting, as it were, with his cast of flies, every square inch of the surface, and killing the biggest trout of the outing just at the lower edge of the little rapid that pours into the pool. He has been fishing down-stream, but knows full well that the keen trout with their heads nearly always up-stream will be startled by the reflection, dim though it be, in the mirroring water, of his body or moving rod, and because of this he simply outflanks them. Pages could be filled with descriptions of the acquired knowledge based on years of experience, of the old angler for trout, but space forbids.

USE THE FLY IN EARLY BASS FISHING.

ON June 15th in many States—rightly or wrongly—fishing for the black bass begins. In some localities, even near each other, these fish are in both good and bad condition at this period of the year, but are seldom in such a condition of health and voracity as to take the lively minnow or horrific helgramite, the mysterious “what-is-it” (a larva of one of the *Libellulidæ*), or the toothsome crawfish. They scorn the grosser diet of the later year, nor will they, as in early autumn, take to a “diet of worms” with anything like religious fervor. But one who has lived long beside a black bass lake of unexampled productiveness, would suggest that they will take the well-tied artificial fly as soon as the season opens, and the insect life of the waters begins to ascend in metamorphoses into the upper air.

If the season be an early one, the bass will begin to seek food and recuperation from their domestic duties as early as the middle of the month. A careful observer will notice that they are off their spawning beds where the white gravel has been washed and smoothed in large patches, and are cruising round in the adjacent deeper waters. In early morning, before the perpendicular rays of the sun strike hotly, these fish will be found at times almost in herds, and ready for “fine and far-off” methods of sport. For as grand old Seth Green once said to me, “When you’re fishing for bass you don’t want them to know you’re in the same county.”

And he was right, as in everything else pertaining to fish hatching and fish catching. Wherefore, let the bass angler joint his seven-ounce fly-rod and mount his six-foot leader with a couple of flies tied on a number five hook. What shall they be? My favorites are the coachman, either plain or “royal,” for the stretcher, and the “bonnie brown hackle” for the dropper. And then I have other favorites, such as one I call the “McClellan,” after a dear departed angling chum, which is thus compounded: Body, deep orange silk or mohair—preferably the latter—ribbed with silver tinsel; hackle, a brown gamecock’s; tail, a strip of red ibis, and wings, the beautiful barred feather of the wood-drake, from under the wings. Ay, but that is a beautiful fly, and woe betide the gallant bass, who, “like a girl valuing the giddy pleasure of the eyes,” leaps forth to make it his own! In one hour of the day in which I first hit on the combination and made that fly I caught thirty-two small-mouth black bass, and they weighed over fifty pounds. Other flies for other waters are equally good, of course, and maybe better. *De gustibus non est disputandum.* I

have used the always respectable professor and the venerable grizzly king, not to speak of the elegant Fitzmaurice—so like in value the good fellow after whom it is named—and in turn many others, all of which have given me sport galore. But whatever lures you use, good angler, let it be only the fly and the fly-rod till after July be gone far past.

APPROACHING ON A LOW STREAM.

SOME of the streams commence to run low in June, and the trout become wary of an angler’s legs, although gently moving in the water, or even of his presence on the bank, be the day cloudless or overcast. Trout seem to have, on waters much fished, a knowledge of the fisherman’s form if erect, although no apparent reflection is cast on the surface of the stream, for the angler, when casting, is standing with his face to the sun. When the rodster is at least five or more feet from the edge of the stream, and the pool deep but narrow, the trout, lying close to and under the bank upon which the angler is standing, cannot see him. The question can only be solved by the laws of refraction, the deflected angle of which, while passing through the water, poses the angler in midair. Trout must be approached more gingerly and warily as the season grows, and the tackle, particularly the water gear, must be dainty in build and manipulated with care and delicacy.

The stream should be carefully waded; slide your feet, rather than lift them, and whenever possible cast from the bank, walking very gently, as the slightest concussion on the ground will send the trout scudding up or down stream. As the season advances the fish become more critical as to flies. If the day be dark, use bright feathers; if unclouded, with the sun ablaze, light colors will serve you best. This rule has been handed down from Walton’s time, but, like old liquor, age improves its strength and efficacy.

If the stream to be fished is low and shallow, use small flies tied on No. 14 hooks; on some waters I have found midges dressed on No. 20 hooks effective when all other flies would not induce a rise from the trout. But, above all things, do not be led into buying a big wallet full of heterogeneous feathered lures—a dozen or so of the standard patterns will suffice. The fathers of the craft in America, Thad. Norris, Dr. Bethune, Inskeep, Genio C. Scott, Seth Green and others have all told us that a few flies of assorted standard patterns suffice to fill the creel if the trout are rising; if they are not, all the feathered lures, and they number over 1,500 in sizes and dressings, however deftly cast, will not tempt them.

THE UNIVERSITY ATHLETIC OUTLOOK.

HARVARD BASEBALL.

BASEBALL has opened at Harvard in a manner encouraging to alumni and undergraduates. While there remains a great deal to be accomplished in team work, the nine is farther advanced and playing more consistent ball than the average Harvard nine at this time of the season.

It is a better fielding team than Harvard has had for years, and the batting and base-running are about average for Harvard, which means that the base-running as a whole is poor. The games thus far as a rule have shown the same inability to bat, when hits were needed, that characterizes a Harvard nine, and the attempts at sacrifice hitting have, with a few exceptions, been disastrous, except in the cases of Loughlin and Coolidge.

The fielding is sharp and accurate, but there have been no signs of team batting.

Thorough practice in bunting has begun to tell, and many of the men are fairly sure of advancing a runner to second. As a general thing, however, he remains there until the end of the half inning. The team has shown little ability to bring men home.

In former years Harvard batsmen were coached in the beginning of the season to "just meet the ball." When they became fairly proficient in this, they were told to hit it hard. This year they have been hitting at it hard from the beginning. But they have not yet met it with regularity.

With the exception of short-stop and left field the nine is playing now as it will play in the championship games. These two positions are still in doubt, but Coolidge ought eventually to make good at short-stop, as he batted well on his class team last year, and seems simply to have lost confidence for the present in his ability to hit. He is the cleanest and best fielding short-stop Harvard has had since Sullivan of the '93 team, but at the bat he is woefully weak, except in sacrifice hitting. George is not good as a fielder, but could hardly fail of doing as well or better at hitting.

G. C. Clark at third has been doing the best batting for the team, and about the same quality of fielding as last year. His throwing and handling of the ball are good, but he is just slow enough in getting to a short hit to have his throw beaten out by the batter. This is a dangerous fault, as a great many slow balls go to third base in the college games.

Loughlin at centre is perhaps the most valuable man on the team, for he is an excellent fielder, a good hitter and bunter, and fast on

the bases. Wendell seems to be the selected right fielder. He is not of the first class, but none better is available.

Captain Reid still shows his old weakness on fouls, but in all other respects he is a first-class back-stop. Stillman's work in the box excels that of Kernan considerably. They both deliver a good ball, but the former has better control, and is very much quicker to find the batter's weaknesses. Kernan is quicker in fielding and faster on the bases. Neither has shown much ability at the bat.

It is still undecided as to who will cover first base in the big games. Kendall replaced J. D. Clark in the latter part of a trial, but his decided weakness as a batsman makes it doubtful if he can hold the position. Both are aggressive in the field, but are inclined to slip up on low-thrown balls.

Fincke came back surely to second, after he had been kept out by George in the early season. He will undoubtedly hold the position, as he is playing a sure, fast game and is hitting the ball hard, though not always safely.

Jaynes and Ewer are fighting for left, with the chances first favoring one and then the other. Both are fair fielders, although the former is weak in throwing to the plate. The writer believes that J. D. Clark, with thorough coaching, could have displaced either of these men.

In the games thus far Harvard has shown hopeful steadiness in the field, the team standing up to the fielding like so many veterans. This was especially noticeable in the first Brown game, in which, for ten innings, not a man of the opponents received a base through a Harvard misplay.

Harvard will nevertheless be at a disadvantage in the big games, especially against Princeton, as far as batteries are concerned. In Kafer and Hildebrand Princeton has a tried and experienced battery, who have worked together for two years; and if either of Harvard's freshmen pitchers can equal Hildebrand in coolness and general efficiency it will certainly be a most pleasant surprise to Harvard. But the Crimson is always last of the college nines to round into shape, and this year's team has the possibilities of proving one of the best that have represented Harvard for several years.

ROWING.

THERE has been some exceedingly good rowing at Cambridge during the last month, better rowing than has ever before been seen on American college waters at this time of the

year. The spectacle of 250 to 300 men on the river every afternoon has really been most impressive. And yet in this very excellence lies much danger—the danger of thinking too kindly of one's self. Already signs of it are showing. The Harvard papers, the university, are full of "how well the crews are rowing," "how far advanced," etc., and much steady work will be required by the coaches of the oarsmen in order that they may escape prevailing symptoms.

Splendid prospects have before the year 1900 been wrecked by premature exaltation, and Boston holds several alumni who were in at the death. Perhaps, however, this year will disclose the profit which is said to follow hard upon experience dearly bought.

When the season opened it looked as if there would be a great many changes in the 'varsity, what with the large number of oarsmen and the likelihood of the '99 Freshmen furnishing some exceptional material. But as June draws near, hope centers more and more around the remains of last year's successful eight.

Truth to tell, there are not many promising medium-weight and lightish men. The most likely of those who have presented themselves are giants, and already the boat is somewhat overloaded.

The candidates retained after the Weld and Newell graded crew racing are Higginson, Harding, Evans, Sheafe, H. Bancroft, Wood and Lawrence, of last year's crew; Biddel (No. 7 on the '98 crew), Shuebruck, Ladd, Bullard, Amery and Goodell, of last year's Freshmen, and Martin, McConnell, Du Bois, Henderson and Fitzgerald.

The most serious disappointment thus far has been the loss of Tilton, who was obliged to stop rowing on his physician's advice. Tilton pulled No. 4 in last year's boat, and was quite the most effective man in it. H. Bancroft has taken on considerable weight and will have to improve on his '99 form in order to make up for the added pounds. Shuebruck is a very powerful oar, and has a fair chance to make the 'varsity. Lawrence at 5 is doing better this year. Wood, 3, is a very powerful man; looks clumsy at first glance, but is really a smooth oar and pulls hard. Harding is pretty sure of bow. There are too few good light men.

Curiously, the disturbing place this year is the same as last—No. 7. Sheafe is not an ideal, and is not doing so well as he should. Higginson will stroke, of course. On the whole, it looks as if the crew would be heavy, and it will need the more snap therefore.

YALE BASEBALL.

WITH five new men filling positions on the nine, the question of its play and place later in the season becomes largely one of shaping the material. It is peculiarly a nine to be made or marred by the judgment and personality of Captain Camp, who, thus far, has shown acuteness, tact, and the quiet, but firm, authority which command the confidence of the team and of the university. But in the comparatively raw material of the nine he has still many faults of play to mend.

The outfielders, while trustworthy when they reach the fly ball on ground hit, are a bit slow in covering their field, and lack somewhat that precision in marking down a ball and economy of time and space in reaching it which are prime traits of strong out-play. On the important long throw to the home plate the outfielders are fairly accurate and swift.

The infield is quick and its general form good in individual play. But its team-work, especially as regards protective play, the covering of bases, and instant harmony of judgment, leaves much to be asked, the tardy decision of the new player not yet having ripened into the quick, mechanical instinct of the veteran.

The problem in the batteries, which of late years has so often vexed Yale baseball teams, this season renews itself. Captain Camp will have to decide, when the championship games come on, amongst Robertson, accurate as a pitcher and in his field work, but with strange variation from game to game in his ability to prevent hits; Garvan, a pitcher of power and versatility, but negative in the field and at the bat; McKelvey, a fair all round pitcher and player; and Cook, whose hard hitting is of special value. The best omen for the pitchers in this direction is their evident appreciation, at last, of the deadly character of the "base on balls."

At catcher's place there is a nice and difficult choice to be made between the sharp-throwing and pretty strong-batting Cunha—handicapped by his immense weight both in base-running and in covering ground on fouls—and Sullivan, a good batsman and base runner, but with play, otherwise excellent, marred by his old and persistent weakness of slow and inaccurate delivery of the ball to second base.

In more general aspects the base-running of the team, varying much in individuals, is fair, as a whole, with a little too much of the old tendency of Yale teams to be too "dead" in base leads and to take too slight vantage of an opponent's slip. The batting belongs decidedly to the average, rather than brilliant or powerful, type, Sharpe being about the only man who can be classed as a hard hitter, and

like most hard hitters, uncertain. Somewhat lax coaching of base-runners has been a fault which ought to be easily eradicated.

This year's team, as a type, belongs to the middle class of Yale University teams. While far from a "star" nine and, indeed, with no player of the very first magnitude, the aggregation is good, the morale excellent, and the strange loss of "grit" or something else which so suddenly vitiated the rich promise of last year's nine, need hardly be feared.

As an innovation at Yale may be noted the forming of a second or "college" nine, which has gone to a training table of its own—a good plan, it may be, for the development of baseball substitutes, but emphasizing a little unpleasantly the extension of the costly training table system as to which maturer athletic sentiment at Yale is beginning to demand restriction rather than enlargement.

THE BOATING SITUATION.

THE boating situation at New Haven this year possesses unusual interest, and the progress of events is being closely followed alike by Yale men and rowing men in general. The success of Yale crews during the ten years following 1885 was out of the ordinary, and established the methods there in vogue so thoroughly that some extraordinary event was needed to create question of those methods.

The extraordinary event came, however, in 1896, when the Yale crew met and was beaten by the Leander crew at Henley, and the questioning immediately began. The situation was thoroughly studied by those then most instructed in Yale boating; and the conclusion reached that Leander's victory was due, not so much to better execution as to a better style of rowing—a style which was considered an improvement on the stroke evolved at Yale under the leadership of Mr. Cook, on the foundation he originally got from Cambridge and Oxford.

In accordance with this conclusion, Mr. Cook at once set about to master the stroke as at present seen on the Thames; and the Yale crew of 1897 was coached on these new lines, many of the innovations in style being taken direct from the English crews, a few being more or less modified to suit the different conditions required in the American college regattas. Thus the comparatively short slide, the exaggerated reach with the back, and the narrow blade, became prominent features in the Yale style of rowing—features which up to that time had been sedulously avoided at New Haven. Their introduction was awarded a varying amount of success; and the seasons of 1897 and 1898, while not affording absolute victories, were not barren of good re-

sults, and the men most closely connected with the crews of those years viewed their work with a certain satisfaction as being along the right lines, and good enough to yield fruit sooner or later.

But in 1899 it was impossible for Mr. Cook to continue the supervision of the coaching, and the question arose as to what policy should be followed for that year. There was a rather strong feeling among many boating men that the method which had given Yale almost unvarying success for ten years had been rather hastily condemned, and that possibly that method was still available for advantageous use.

Captain Allen thoroughly canvassed the opinion of all boating men among the Yale graduates who had taken any interest in coaching either under the old regime or under the new. The situation was discussed, and the conclusion reached that there were many good points in the newer style which could be successfully engrafted on the older with a result better than either alone could achieve. Accordingly the short slide and the narrow blade were retained, but otherwise it was determined to return to the method in vogue in the late eighties and the early nineties. Captain Allen himself, having had considerable experience with the newer method, was to assume the coaching on these lines; and Dr. Gallandt, stroke of the '92 and '93 crews, was appointed head coach, with promised aid from half a dozen men who were active in coaching in the pre-Henley days.

This plan well-conceived developed unsuspected difficulties in the selection of the most valuable points from each method; and the more finished the new became, the more perplexing became the settlement of conflicting points until the whole matter was more or less unsettled in the minds of crew and coaches alike. The result was disastrous, not perhaps so much in the capabilities of the crew as in the uncertainty of the basis on which the style of rowing rested. At any rate the defeat at New London last June emphasized this uncertainty and made Yale boating men fully realize the hazardous position in which they stood.

This realization has brought about a complete return in 1900 to the method so ably carried out year after year by Mr. Cook and his assistants; and the unusual interest in Yale boating this year centers around this retrial of a discarded system. Apparently an attempt has been made to eliminate entirely every factor brought into prominence by the Henley experience, and the long slide, the wide blade, and the straight back are again in vogue in New Haven harbor. Dr. Gallandt remains

at the head of the coaches, and should prove valuable with the good experience from his work of a year ago, when he first attempted active coaching. He is being assisted by the men who were active in coaching ten years ago, Bolton, Rogers, Stevenson, Hartwell, and Ives. These men know but the one style, and hence ought not to go wrong in their ideas unless their absence from the coaching ranks during recent years has made them rusty, and the old habits of the men in the present crew prove too strong for them to break. This, however, is hardly likely, and so we may fairly expect to see a Yale crew at New London this year simulating in appearance the crews of '88, '90, '92, and '95.

It is early yet to foresee to what degree of perfection the right men wearing the blue may attain, but their progress at present seems to be in general satisfactory. They are taking matters very cautiously and endeavoring to lay a foundation that the more rapid work in late June cannot disturb; and to this end they have not long been rowing in a shell, and the stroke is not above 28 to the minute.

They have not yet succeeded in mastering the sharp catch, followed with a long drive and deliberate recover, so characteristic of Cook's crews in the old days, but they are apparently working to this end and show in marked contrast to last year's eight in this respect. The personnel of the crew seems to be giving the coaches very little anxiety, and the candidates have settled themselves to the task before them with determination, but still with a lack, perhaps, of that old time "carry-all-before-it" idea which characterized Yale crews, in fact Yale athletics in general, five or ten years ago.

Whether victory comes to the blue or not, Yale is to be congratulated on having settled upon a definite policy, for in that alone lies the chance of success; and its lack in recent years may, perhaps, be held responsible for the rather indifferent showing made.

PRINCETON BASEBALL.

JUDGING from its scores, Princeton has a notable baseball team this season. But that is not the way to judge. Thus far so few of Princeton's games have been with teams in the same class that it is impossible to forecast what will be the result of the forthcoming great games. A team that makes nine runs in the first inning (as against Lehigh) and that has got into the habit of running up shut-out scores that sound like old-fashioned football reports—such as Princeton 16, Lafayette 0, and Princeton 20, Lehigh 0—may play winning ball against nines in its own class when the time comes, or may go completely to pieces owing to that very matter of habit and

the shock of unaccustomedness. What is better to call to the attention, though not always so convincing to the graduate at a distance, is that the 1900 team was worked into shape early in the season, and that it has settled down to steady workmanlike university form, frequently playing errorless games and batting in a way to delight the Princeton heart. There have been enough exceptions to this generalization to prove the rule.

The new men, Pearson the freshman first base, Steinwender, second base, and Myer, short-stop, can all bat, not only well, but very well, and in most ways work not at all like new men. Scott, the change pitcher, has developed fully as well as it was hoped he would as a pitcher. The Southern trip during which he pitched not only against such able batters as Georgetown's and University of Virginia's, but also against the professionals, helped his belief in himself. At times he shows promise of learning to bat, also. Of Hillebrand's pitching it is only necessary to say that it is very much the same as last year, and produces a sense of confidence not only in the eight other men playing on the team, but in all Princetonnians watching him. Hillebrand is a very good figure of an athlete when he stands up against a known hard-hitter with the bases full.

As for the rest of the team, they might be summed up by saying that in the field they average about as well as any Princeton nine of recent years, and at the bat they seem even a little better, though here, too, it is not safe to generalize until proper tests have more frequently been applied to their metal. In base-running there is still room for improvement, though at times it has been brilliant.

In short the personnel and present form of the team are excellent, and the prospects for the rest of the season depend on the physical and psychological conditions. It may be stated that there need be little fear of over-training. The present management seeming to realize that the team is made up of youths, not matured men, has adopted a wise policy of frequent rests. On the day before match games they give the team very little work at all, and most of that time is devoted to batting.

CORNELL ROWING.

THE two most noticeable features of the 1900 crew training at Cornell are the severity of 'varsity practice and the apparent early selection of the Freshmen eight. These indicate clearly enough the character of Courtney's determination to develop a winning 'varsity.

Rapid development has further been aided by the transfer of the practice, two weeks earlier than in '99, from the Ithaca Inlet to Cayuga Lake. Largely because of this advantage the

'varsity is moving with a unanimity that is unusual for this stage of progress.

The 'varsity order, with Robbins, stroke; Dalzell, 7 and captain; Francis, 6; Smallwood, 5; Beardslee, 4; Petty, 3; Vanderhoef, 2, and Hartley, bow, seems for the most part fixed. Francis, however, may be tried at stroke.

The 1900 freshmen are really a fine lot. Their eight has shown exceptional strength already, and by June should be speedier than the winning freshmen crew of last year and may approach Cornell's standard, the '96 freshmen.

To sum up. The crew-training has been fairly satisfactory. Especially gratifying is the 'varsity's progress, and the probability of a faster crew than that of '99 is now a certainty.

Cornell's plan of building her own boats has now been in operation for a year, and the year's test has clearly demonstrated its advantages, not the least of which is the opportunity offered for valuable experimentation. The cedar shell built last spring by Hoyle under Courtney's supervision, and used by the freshmen and university crews at Poughkeepsie, proved altogether the most satisfactory ever occupied by a Cornell eight. Hoyle will continue permanently as boat-builder, and it is planned that eventually not only the shells but all the rowing equipment will be of his manufacture.

PENNSYLVANIA BASEBALL.

THE baseball team gives indications of being stronger than for several years. The men have made distinct improvement the past month, especially in their speed. The infield is still the weakest part of the team, but Captain Flanell has tried several combinations, and, at last, with Jones on first base, Collier at second base, Brown third base, and Shape short-stop, seems to have found a good combination. These men have gradually rounded into a fairly fast infield. The other positions have been picked for the season: Flanell, catcher; Gamthrop, right field; Heuston, center field; and White, left field. It is possible Orton may replace Gamthrop, as he was playing fast ball until injured in the Columbia game. Layton, Leary, and Devlin are the pitchers. The latter two are freshmen and unsteady at critical moments, but they give promise and both have speed and excellent control. Leary is especially strong, and with a little more experience will be very serviceable.

It is encouraging to note that the interest in baseball has been greater this year than since '91 and '92. The attendance is still below what it should be, but it is twenty per cent. better than last year.

Another especially pleasing feature of Pennsylvania's game this year has been the total absence of anything approaching rowdy ball.

ROWING.

THE crew seems certain to be as fast as that of last year, with a chance of being even faster, the time trials being better than, at this time, last year, although the men are in no better condition. Van Kathoven, who sat in the '99 boat, has appendicitis, and is, of course, out of rowing, which is a heavy loss to the crew. Allyn, of the '99 second crew, who replaced Van Kathoven, is showing excellent form, and will very acceptably fill the position. The men at present rowing are Gardiner, stroke; Fleckwir, No. 7; Snower (captain), No. 6; Stehle, No. 5; Allyn, No. 4; Davenport, No. 3; Atkin, No. 2; Kintzing, bow.

These are likely to be retained in these positions until at least after May 30th, when the second crew meets the second crews of Cornell and Columbia and the Weld crew of Harvard.

Of the second crew, Snyder, stroke; Winsor, 2d, Sinclair, 5th, and Henderson, bow, are developing nicely, and one of them may be tried in the 'varsity when the final shake-up occurs.

The freshmen crew is keeping up its good work, and its chances for repeating the victory (June 30th) of last year seem excellent. The men have the physique to stand training, and have shown steady development in blade work and in the use of their slides and legs. The crew averages 157 pounds.

COLUMBIA ROWING.

THE rowing squad entered upon its work this season 130 strong, and with sufficient material to put five good crews on the water at the opening. These have now been reduced to the 'varsity and the second crew and three Freshmen eights. Of last year's 'varsity Captain Mackay, Irvine, Nash, and Falconer (stroke) are all present candidates, while of the others the most promising are Oddie, Weekes, Jackson, Vulte, Maclay, Mount, Huffaker, Boyesen and Burt.

Effort is making this year to mend the break and the sudden movement which have hitherto been characteristic of the Columbia stroke, and to make it longer toward the stern as to body swing—to make the parts run into one another more smoothly than formerly. Incidentally, they are seeking to get more bevel on the blades when they enter the water, and to keep them in longer.

The material is fully up to the average, and the crew is showing somewhat better than last year, though not revealing either the speed or the smoothness of either of its Eastern rivals, Cornell and Pennsylvania.

BASEBALL IN THE MIDDLE WEST.

As the baseball season advances it shows promise of being one of the most interesting the Middle-Western colleges have seen. All

the teams of this section have very hard schedules with natural rivals, and in addition both Chicago and Michigan will entertain Eastern nines for a series of games, the former playing Pennsylvania and the latter Cornell. It is to be hoped that the close athletic relations between Michigan and Cornell (which were renewed last season) will be fostered. These two universities are old rivals, and their geographical location is such that they seem to be the natural representatives of the East and West in intercollegiate competition.

While all the Western nines began the playing of their important games earlier than usual this season, nevertheless it is impossible at this writing to secure any deep insight into their future.

ILLINOIS.

THE University of Illinois undoubtedly has the best-balanced team of this section. Very strong last year, practically the entire nine returned, and this season's combination promises exceptional ability in every department. This is particularly true of the battery positions. Johnston is without doubt the best catcher in the West, and besides the two veteran pitchers, McCullum and Lundgren, Illinois seems to have the "find" of the year among the new pitchers in Falkenberg. The majority of the team behind these men are fast fielders, but the nine's batting has done more toward winning games than even the clever work of this battery. While baseball is the most uncertain of games, from its early showing the Champaign team, probably the strongest Illinois has had, seems to have the best of chances to gain the foremost position.

MICHIGAN.

MICHIGAN, baseball champion of 1899, remains in 1900 rather an uncertain quantity. There is an exceptionally strong outfield and a fast, though erratic, infield—all veterans—but the battery question seems a serious one. Whitney, ex-Amherst, is only fair behind the bat, and Beistle and Utley, who are the most promising of the pitching candidates, have shown no exceptional ability and are decidedly lacking in experience.

Over two hundred candidates presented themselves at the first call, and the coaches hardly knew what to do with the army of aspirants; but out of this great number no dependable pitcher has been developed to take the place of Miller who, although in college this year, is ineligible under the four-year rule. The old men, Snow, Captain McGinnis, Condon, Blencoe, and Flesher, are fielding well; but the team, as a whole, is failing to hit the ball with any degree of regularity, which, with the weakness in the

box, is the explanation of most of the games lost.

The Michigan management has certainly violated the spirit of its rules by using pitcher Miller against Beloit. The fact that Beloit does not subscribe to the "conference rules" does not excuse Michigan for this disclosure of the wrong spirit and the setting of a bad precedent for the mere sake of winning.

Michigan has announced its intention of sending a track team abroad, too, if the men show strength enough to warrant a good showing, but the plans have not materialized as yet.

CHICAGO.

THE Chicago team, while largely composed of veterans, has thus far been something of a disappointment, and suffered in its early college games on account of the shifting of the players. Sloane, said to be the best short-stop that Chicago ever had, has been kept out of the games thus far because of class-room delinquencies. The fact that his absence has hurt the nine's chances and interfered somewhat with the development of team work makes the faculty's action all the more creditable, however. The team's play has been good and erratic by turns, and the men appear to have developed a tendency to "throw the ball around," at critical times. The fielding is none too good, and the batting fair, although hits fail to come when most needed. When the warm weather brings out Merrifield to strengthen the pitching force Chicago will be strong and ought to be reasonably successful.

WISCONSIN.

WISCONSIN will do well in winning the majority of her games, for baseball was in what seemed to be its expiring throes when the spring term opened. The last few years have seen a very rapid decline in this sport, in which Wisconsin once ranked high; and some idea of the condition may be derived from the fact that in February a mass meeting of the students was held to discuss the question of definitely abandoning it. Last season the team lost ten of fourteen games played, and was a heavy financial burden. When the meeting decided unanimously to keep up the game, and Phil King was secured as coach, the outlook improved; but very little material was forthcoming and the promise of the early games, which saw Michigan beaten 7-1, has not been fulfilled. The men field fairly well when not subjected to any very severe cannonading, but only a few of them are natural ball-players and only one or two are strong hitters, seven being left-handed batters. The nine is weak in the box and at the bat, and not notably strong anywhere.

PHOTOGRAPHY AS APPLIED BY SPORTSMEN.

W. E. Carlin.

THE photographic illustration of field sports has never taken the position it is entitled to. That the fault does not lie at the door of photography is evident from the many fine examples of such work shown at recent exhibitions.

Photography may or may not be a mechanical process, just as one chooses to take it. I do not call it art, but a thoroughly plastic process, which, in the proper hands, will some day be art. The negative, if made with the proper apparatus, gives a correct drawing of the scene, including proper perspective; but it is beyond the power of any plate to render even approximately correct tonal values, while the lens, unfortunately, has not the selective faculty, and will, on the original negative, show many disturbing details which a painter would have avoided. These are the faults which the photographer must correct. With such printing processes as the gum-bichromate or the brush development of platinotype paper the negative becomes merely a guide, which one may follow as far as fancy dictates. All false values may be corrected, details may be subdued or eliminated at pleasure, while in the latter process the drawing may be changed. Not only can details be eliminated, but they may be introduced.

If one is simply after records, and these are often interesting and valuable—all very well! But if one intends to place his work on the same plane as illustrations made with the brush, he must exercise the same care or even greater care than the artist. The composition of the scene must be studied from different points of view, remembering that in simplicity lies strength. The lighting must be watched until it becomes most favorable, and since the lens is not selective the operator must be so. Above all, let there be a good and sufficient reason for having made the photograph at all.

A most interesting branch of the sportsmen's photography should be the combination of the jack and the flash lamps. Many of the ponds in the Adirondacks and Maine woods are good grounds to work on. It is an easy matter to run your canoe within the required distance of a deer, but it is not so easy to find a flash lamp of sufficient power to give a really good light for out-of-door work.

The faults of nearly all flashlight work are the excessively harsh high lights, lack of half-

tones, and the black, heavy shadows, devoid of detail. This is due to the light being weak and local in its effect. I am having made two flash lamps, one for use in the boat and the other automatic for a set camera. The former consists of a shallow gutter of metal, held by a long handle. The powder is distributed along this gutter and not piled in a heap, and is fired by the explosion of a cap, the trigger being simple and positive in its working. From former experiments I expect to use from 3 to 3½ ounces of flash powder.

The second lamp is intended to set by a runway, so that the deer may take his own photograph. It consists of a perfectly light-tight box into which the camera is set, lens open and slide drawn ready to take an exposure. The pan of flash-powder is placed on top of the box and covered with a very thin paper to protect it from damp, and is fired by a small electric battery. A thread is stretched from a door in the box across the runway, and at the lightest pull of the thread the door flies open, makes connection and fires the flash, and drops again in position. This sounds quite complicated, but is, in fact, very simple indeed.

This allows one to set his apparatus out before dark, and if exposed during the night it is safe from light inside the light-tight box.

These two lamps are made by Mr. Charles Mills, of New York, who has brought flashlight to a high state of perfection. While very short focus lenses are to be avoided for pictorial and landscape work, they are advantageous for this sort of work, since so many more planes are in fairly good focus.

ON the set camera—a 4x5—I use a Goerz lens of 3½ inches focal length. This allows the deer to be several feet on either side of the runway and still be in good focus. Of course the image is small, but such subjects are best suited to enlargement and lantern slides.

A very rapid plate should be used, such as Seeds No. 27, and should be developed in metol, which yields soft, delicate negatives, full of gradations and detail, such negatives as are best suited to lantern slides and enlargements. When washing water is warm, rinse the plate after leaving the fixing bath and place in a solution of 1 part formalin, 500 parts water, for a minute or two. This toughens the film and so allows of longer washing without the danger of blisters, etc.

THE THOROUGHBRED

THE superiority of the American style of riding continued in remarkable evidence up to the close of the English racing season of 1900, and for the first time in history a foreign-born rider heads the list of winning jockeys, this honor having been secured by the American Lester Reiff. The notable achievements of the other American jockeys have been previously commented upon here, but it is especially significant to note the greatly improved riding of such English jockeys as have been wise enough to adopt the "American seat." It is, therefore, not surprising to learn that Mornington Cannon, who is probably England's most competent horseman, intends to practise *à la* American during the winter, and it may be confidently expected that this rider will reassume the supremacy another year if he remodels his technique upon the lines of the Reiff brothers, Sloan, Maher, *et al.*

Meanwhile, it is interesting to note that the foreign demand for American jockeys shows no signs of abatement, and it is especially remarkable that Fred Taral and Samuel Doggett should have recently secured remunerative engagements to ride in Austria in 1901. Both jockeys have been comparative "back numbers" in their own land of late years, and yet their respective Austrian retainers are \$6000 and \$8000! Verily, the future of the American jockey abroad is particularly rosy when such plums can be picked by Taral and Doggett; and it is to be hoped that they and all the recently exported American jockeys will have the good sense to behave themselves. In this respect, however, the situation in England is not particularly encouraging for one or more "originals"—Sloan, Martin and Rigby—inasmuch as there exists a well-defined suspicion that some or all of this trio will be refused licenses in 1901. They will have only themselves to blame if this proves to be the case; for, despite all the recent hysterical utterances of American newspapers, the turf history of England proves, beyond question, that all foreigners who conduct themselves properly find there a thoroughly fair field.

Lord Durham's attack upon American jockeys "and their followers," in the course of a speech before the English Jockey Club in October, precipitated the most exciting controversy in the history of the turf in an international sense. "Doping," "electric saddles" and various other illegitimate devices have since been ascribed to some American trainers and jockeys, although no official action has been reported up to the time of writing these lines. The outcome, however, may be awaited with perfect confidence, for the English officials are thoroughly able to deal with these serious matters. Inasmuch as American turf authorities have found it necessary to pass rules against these practices, it is in no way an invidious distinction if our English cousins are equally anxious to debar such.

THE California race-courses at Oakland and Tanforan Park are experiencing unusual success thus far with their winter meetings; and, were it not for their tendency to encourage the early racing of two-year-olds, no fault could be found with these associations on the Pacific slope. They certainly afford a splendid opportunity for many horses to provide towards the maintenance of their stables, and the class of racing is really very fair on the average. Then, too, the race-courses are verily perfect in matters of arrangement and detail. It is a great pity, however, that their racing of two-year-olds should begin virtually with the first day of the new year. The day is coming when the formation of a national jockey club will be a positive necessity, if only for the regulation of this one matter, in the interests of both the racing and breeding departments of turf activity.

THE autumn racing on Jockey Club tracks in America was somewhat lacking in the interest of former years. Too many of the better class of horses were either *hors de combat* or under orders for shipment to England, and their absence from the programmes was severely felt. The Empire City race-course at Yonkers was inaugurated as a "running track" by a two weeks' meeting of comparatively moderate sport, about the only significance attaching to it being the demonstration of two facts—namely: First, that the race-course itself is thoroughly satisfactory as mile tracks go; and, second, that some improved facilities must be arranged for the transportation of the metropolitan race-goers to it. Our English cousins may take kindly to a cross-country trip to and from the railway and the race-course, but Americans are not educated to that sort of prelude and postlude in connection with a day's racing.

THE turf feature of the autumn in America has been the announcement of the Century Stakes, the new fixture of the Coney Island Jockey Club. The race is to be for three-year-olds and upwards at one mile and a half, each horse carrying weight for age, and its guaranteed value will be \$10,000 in 1901, \$15,000 in 1902 and \$20,000 in 1903. The American turf has awakened none too early to the necessity for valuable races of this character, and the best interests of the sport demand a duplication of the C. I. J. C.'s policy by every other important Eastern association. Such a policy, had it been already in operation, would surely have prevented the recent exportations of high-class American-bred racers to England. The ownership of really good horses has always been encouraged in England by the liberal representation of weight for age races. In America, however, the tendency has for a decade or so been too strongly towards handicaps, in which the first-class horses are naturally required to shoulder heavy burdens.

W. H. ROWE.

THE AUTOMOBILE

AUTOMOBILISM is in winter quarters, but not sleeping. No sensational innovations are in immediate prospect, and none are looked for until the season of frost and snow shall have passed. Whether then anything is likely to transpire to cause a radical change in the public's attitude remains a matter of conjecture. None either affirms or denies.

The general verdict upon automobilism seems to run about as follows: "A little too new for utility, a trifle too exacting for pleasure, a shade too crude for elegance, but coming in the right direction, and, altogether, an interesting movement of Titanic promise, and affording even at present an excellent diversion for persons of liberal, aggressive temperament and generous purse."

ALL who attended the shows so far held bore home new impressions, and felt a new ability to tell the chaff from the wheat; but it is not easy to summarize what the effect will be of that subtle reciprocation between "the trade" and the public which takes place at exhibitions, and shapes opinions in both directions. Yet, a few points seem to have been decided upon.

"Too slab-sided!" This criticism of automobile carriage-bodies has carried weight, and there will be more curves in woodwork hereafter; less of the box effect.

"Those 'bicycle wheels' don't look right with that heavy carriage!" Wheels will be heavier in appearance and, probably, mostly made of wood. They will also be larger proportionately to the size of the vehicle, both front and rear.

"Does not accomplish enough for its weight and cost!" Size and weight of electric carriages are tending downwards; so far mainly in the public's desires; but, no doubt, manufacturers are taking note of it. For steam vehicles the tendency of constructors is in the opposite direction; but the public is passive.

There is an unsatisfied longing for something radically new in the contours, colors and whole, so to say, physiognomy of all automobiles—something to make us feel that we are receiving a completely new addition to the list of good things in life, and not merely being enabled to get along without one of the old things—the horse—which we have really never wished to lose.

The gain in efficiency of locomotion—always disputed—seems of a nature too negative to fully satisfy so long as the new vehicles are not possessed of an individuality entirely their own; in fact, it seems a loss rather than a gain from a sentimental and artistic point of view. The only way to obtain adequate compensation for the loss of a cherished sentiment or artistic satisfaction is to fill the void with a completely new one. And everybody feels that this can only be done by designing the mechanical pleasure vehicle as a thing of striking individual style, conveying a vivid artistic

impression of power, speed and companionship.

IN this respect comparatively little has been done. Among gasoline vehicles there are departures from ordinary carriage style bold, numerous and conspicuous enough to be worthy of notice, and a quota of the public seem to appreciate these new outlines quite keenly, even though in many instances they are the compulsory result of a mechanical necessity rather than an artistic choice. There may be reason to expect freer play for fancy and originality of design also in the vehicles driven by other forms of power.

Naturally, the public has no advice to offer on construction matters, but the industry is profiting by the lessons administered to the trade at the shows and elsewhere. More painstaking measures are the vogue, and makeshifts are falling into disrepute in construction as in design. The carriage is gaining on the motorcycle; the motorcycle is developing into a little carriage. Machinery completely exposed to view or completely hidden—either makes converts. In steam vehicles automatic regulation of the engine is carried to its last sequence, but so is the opposite idea which abolishes the automatic features entirely.

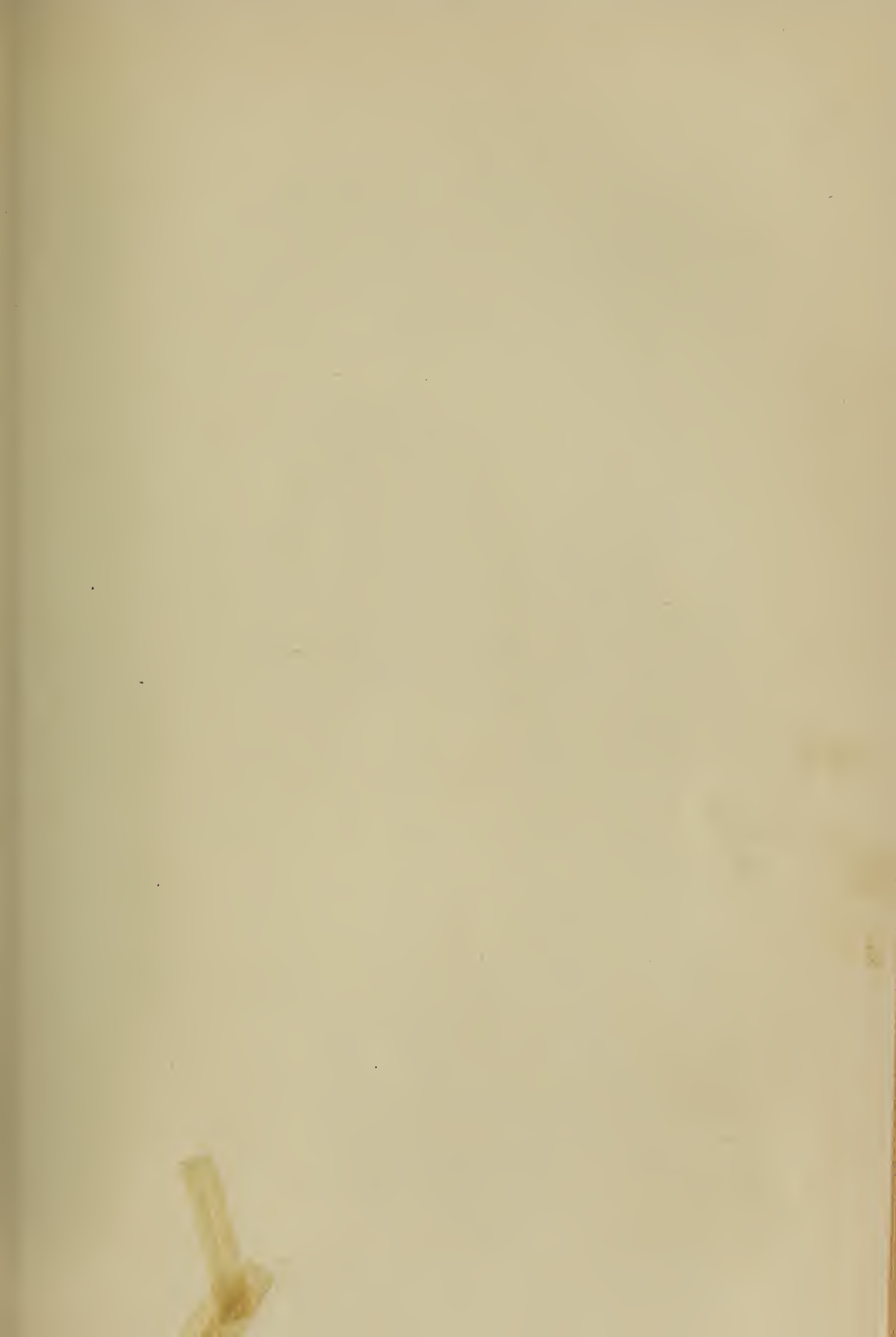
Division of opinion is making headway, and thus the road is being paved for the great diversity in styles of automobiles, which is unavoidable and desirable, because it is necessary for the application of the automobile principle to a great variety of vehicle work. Being carriage and horse combined, the automobile must exemplify not only the variety in present carriage styles, but also the variety in horses.

It seems finally to be understood that the test of business efficiency must be the decisive one for automobilism and the only safe foundation for the evolution of the pleasure carriage.

LOCAL automobile clubs are being organized at a rate that reminds one of the formation of automobile manufacturing companies one year ago. The latter have mostly vanished or subsided for lack of something tangible and practicable to be manufactured. Those that remain are straining their resources in order to increase their productive facilities and meet the demand which seems certain to grow out of club activity. Being most easily organized for rapid production, the steam vehicle branch has the best of this situation. The machinery it needs is in the market beforehand.

A carriage operated with liquid air has made its first public appearance. It runs; and it looks outwardly like a steam vehicle, the engine being also similar, but its utility for automobile purposes belongs to a remote future. For street-car service or similar work over fixed routes the liquid air may, however, prove a formidable competitor of other forms of stored power.

M. C. KRARUP.





"HEV YOU EVER SEARCHED FOR A DEAD MAN?"

O U T I N G

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MAN-HUNTING IN THE POUND.

A PERSONAL EXPERIENCE IN KENTUCKY BORDER LIFE.

By John Fox, Jr.

THE pale lad from the Pound was telling news to an eager circle of men just outside the open window of the little mountain hotel, and, inside, I dropped knife and fork to listen. The wily old "Daddy" of the Fleming boys had been captured; the sons were being hemmed in that very day, and a fight between sheriff's posse and outlaws was likely any hour.

Ten minutes later, I was astride a gray mule, and with an absurd little .32 Smith & Wesson popgun on my hip—the only weapon I could find in town—was on my way to the Pound.

We had a volunteer police guard down at "the Gap," twenty miles away, and we were very anxious to capture those Fleming boys. Talton Hall, feud leader and desperado, had already been hung, and so had his bitter enemy, the Red Fox of the Mountains. With the Fleming outlaws brought to justice, the fight of the guard for law and order was about won. And, so, as I was a member of that guard, it behooved me to hurry—which I did.

* * *

The Gap is in the southwestern corner of old Virginia, and is a ragged gash down through the Cumberland Mountains to the water level of a swift stream that there runs through a mountain of limestone and between beds of iron ore and beds of coking coal. That is why some three-score young fellows gathered there from Bluegrass Kentucky and Tide-water Virginia not many years ago, to dig their fortunes out of the earth. Nearly all were college graduates, and all

were high-spirited, adventurous and well-born. They proposed to build a town and, incidentally, to make cheaper and better iron there than was made anywhere else on the discovered earth.

A "boom" came. The labor and capital question was solved instantly, for every man in town was straightway a capitalist. You couldn't get a door hung—every carpenter was a meteoric Napoleon of finance. Every young blood in town rode Bluegrass saddle-horses and ate eight-o'clock dinners—making many dollars each day and having high jinks o' nights at the club, which, if you please, entertained, besides others of distinction, a duke and duchess who had wearily eluded the hospitality of New York. The woods were full of aristocrats and plutocrats—American and English. The world itself seemed to be moving that way, and the Gap stretched its jaws wide with a grin of welcome. Later, you could get a door hung, but here I draw the veil. It was magnificent, but it was not business.

At the high tide, even, the Gap was, however, something of a hell-hole for several reasons; and the clash of contrasts was striking. The Kentucky feudsmen would chase each other there, now and then, from over Black Mountain; and the toughs on the Virginia side would meet there on Saturdays to settle little differences of opinion and sentiment. They would quite take the town sometimes—riding through the streets, yelling and punctuating the sign of our one hotel with pistol-bullet periods to this refrain:

..G.r.a.n.d C.e.n.t.r.a.l H.o.t.e.l..

Hell! Hell! Hell!

—keeping time, meanwhile, like darkies in a hoe-down. Or, a single horseman might gallop down one of our wooden sidewalks, with his reins between his teeth, and firing into the ground with a revolver in each hand. All that, too, was magnificent, but it was not business. The people who kept store would have to close up and take to the woods.

And thus arose a unique organization—a volunteer police guard of gentlemen, who carried pistol, billy and whistle, and did a policeman's work—hewing always strictly to the line of the law. The town sergeant was the only member who drew a salary. We cracked toughs over the heads, lugged them off to the calaboose, appeared against them in court the next morning, and maintained a fund for the prosecution of them in the higher courts. A whistle blown at any hour of the night would bring a dozen half-dressed but fully-armed men running toward the sound of it promptly.

The result was rather extraordinary. The Gap soon became the only place south of Mason and Dixon's line, perhaps, where a street fight of five minutes' duration, or a lynching, was impossible. A yell, a pistol shot, or the sight of a drunken man, became a rare occurrence. Local lawlessness thus subdued, the guard extended its benign influence—creating in time a public sentiment fearless enough to convict a desperado, named Talt Hall; and, guarding him from rescue by his Kentucky clansmen for one month at the county seat, thus made possible the first hanging that mountain region had ever known.

After that the natives, the easy-going, tolerant good people, caught the fever for law and order, for, like lawlessness, law, too, is contagious. It was they who guarded the Red Fox, Hall's enemy, to the scaffold, and it was they who had now taken up our hunt for the Red Fox's accomplices—the Fleming outlaws of the Pound.

We were anxious to get those boys—they had evaded and mocked us so long. Usually they lived in a cave, but lately they had grown quite "tame." From working in the fields, dressed in women's clothes, they got to staying openly at home and lounging around a cross-roads store at the Pound. They even had the

impudence to vote for a sheriff and a county judge. They levied on their neighbors for food and clothes, and so bullied and terrorized the Pound that nobody dared to deny them whatever they asked, or dared to attempt an arrest. At last, they got three or four recruits, and tying red strips of flannel to their shoulders and Winchesters, drilled in the county road, mocking our drill at the county seat when we were guarding Talton Hall.

This taunt was a little too much, and so we climbed on horseback late one afternoon, wrapped our guns in overcoats and started out for an all-night ride, only to be turned back again at the foot of Black Mountain by our captain and first lieutenant, who had gone over ahead of us as spies. The outlaws were fighting among themselves; one man was killed, and we must wait until they got tame again.

A few weeks later, the guard rode over again, dashed into the Fleming cabin at daybreak and captured a houseful of screaming women and children—to the great disgust of the guard and to the great humor of the mountaineers, who had heard of our coming and gone off, dancing, down the road only an hour before. It was then that the natives, emulating our example, took up the search. They were doing the work now, and it was my great luck to be the only member of the guard who knew what was going on.

* * *

The day was hot, the road dusty, and the gray mule was slow. Within two hours I was at the head of the Pound—a wild, beautiful, lawless region that harbored the desperadoes of Virginia and Kentucky, who could do mischief in either State and step to refuge across the line. Far ahead, I could see a green dip in the mountains where the Red Fox and the Fleming boys had shot a family of moonshiners to death from ambush one sunny morning in May.

Below, sparkled Pound River roaring over a milldam, and by the roadside as I went down, I found the old miller alone. The posse of natives had run upon the Flemings that morning, he said, and the outlaws, after a sharp fight, had escaped—wounded. The sheriff was in charge of the searching party, and he believed that the Flemings would be caught now, for sure.

"Which way?" I asked.

The old fellow pointed down a twisting, sunlit ravine, dense with woods, and I rode down the dim creek that twisted through it. Half an hour later, I struck a double log cabin with quilts hanging in its windows—which was unusual. An old woman appeared in the doorway—a tall, majestic old tigress, with head thrown back and a throat so big that it looked as though she had a goitre.

"Who lives here?"

"The Flemingses lives hyeh," she said quietly.

I was startled. I had struck the outlaws' cabin by chance, and so, to see what I might learn, I swung from the gray mule and asked for a glass of buttermilk. A handsome girl of twenty, a Fleming sister, with her dress open at the throat, stepped from the door and started to the spring-house. Through the door I could see another woman—wife of one of the outlaws—ill. A "base-born" child toddled towards me, and a ten-year-old boy—a Fleming brother—with keen eyes and a sullen face, lay down near me—watching me, like a snake in the grass.

The old woman brought out a chair and lighted a pipe.

"Whar air ye from, and what mought yo' name be?"

I evaded half the inquiry.

"I come from the Bluegrass, but I'm living at the Gap just now." She looked at me keenly, as did the snake in the grass, and I turned my chair so that I could watch that boy.

"Was you over hyeh that night when them fellows from the Gap run in on us?"

"No."

The old woman's big throat shook with quiet laughter. The girl laughed and the woman through the door laughed in her apron, but the boy's face moved not a muscle. It was plain that we had no monopoly of the humor of that daybreak dash into a house full of women and children.

"One fool feller stuck his head up inter the loft and lit a match to see if my boys was up thar. *Lit a match!* He wouldn't 'a' had no head ef they had been." She laughed again, and drew on her pipe.

"I give 'em coffee," she went on, "while they waited for my boys to come back, an' all I axed 'em was not to hurt 'em if they could help it." Then she broached the point at issue herself.

"I s'pose you've heerd about the fight this mornin'?"

"Yes."

"I reckon you know my boys is hurt—mebbe they're dead in the woods somewhere now." She spoke with little sadness and with no animus whatever. There was no use trying to conceal my purpose down there—I saw that at once—and I got up to leave. She would not let me pay for the buttermilk.

"Ef you git hold of 'em—I wish you wouldn't harm 'em," she said, as I climbed on the gray mule, and I promised her that if they were caught unharmed, no further harm should come to them; and I rode away, the group sitting motionless and watching me.

For two hours I ambled along the top of a spur, on a pretty shaded road with precipitous woods on each side, and now and then an occasional cabin, but not a human being was in sight—not for long. Sometimes I would see a figure flitting around a corner of a cabin; sometimes a door would open a few inches and close quickly; and I knew the whole region was terrorized. For two hours I rode on through the sunlight and beauty of those lonely hills, and then I came on a crowd of mountaineers all armed with Winchesters, and just emerging from a cabin by the roadside. It was one division of the searching party, and I joined them. They were much amused when they saw the Christmas toy with which I was armed.

"S'pose one o' the Flemings had stepped out'n the bushes an' axed ye what ye was doin' down hyeh—what would ye 'a' said?"

That might have been embarrassing, and I had to laugh. I really had not thought of that.

One man showed me the Winchester they had captured—Heenan's gun. Tied to the meat-house and leaping against a rope tether was a dog—which, too, they had captured—Heenan's dog. As we started out the yard "Gooseneck" John Branham, with a look of disgust at my pistol, whipped out one of his own—some two feet long—for me to swing on my other hip. Another fellow critically took in my broad-brim straw hat.

"Hell!" he said. "That won't do. They can see that a mile through the woods. I'll get ye a hat." And he went back into

the cabin and brought out a faded slouch hat.

"That's Heenan's!" he said. That, too, they had captured.

And so I wore Heenan's hat—looking for Heenan.

* * *

Half a mile down the road, we stepped aside twenty yards into the bushes. There was the cave in which the outlaws had lived. There were in it several blankets, a little bag of meal and some bits of ham. Right by the side of the road was a huge pile of shavings, where the two outlaws had whittled away many a sunny hour. Half an hour on, down a deep ravine and up a long slope, and we were on a woody knoll where the fight had taken place that morning. The little trees looked as though a Gatling gun had been turned loose on them.

The posse had found out where the Flemings were, the night before, by capturing the old Fleming mother while she was carrying them a bag of provisions. As they lay in the brush she had come along, tossing stones into the bushes to attract the attention of her sons. One of the men had clicked the slide of his Winchester, and the poor old woman, thinking that was the signal from one of her boys, walked toward them, and they caught her and kept her prisoner all night in the woods. Under her apron they found the little fellow who had lain like a snake in the grass beside me back at the cabin, and, during the night, he had slipped away and escaped and gone back to the county seat, twenty miles away, on foot, to tell his father, who was a prisoner there, what was taking place at home.

At daybreak, when the posse was closing in on the Flemings, the old woman sprang suddenly to her feet and shouted shrilly: "Run down the holler, boys; run down the holler!"

The ways of rude men naturally are not gentle, and the sheriff sprang out and caught the old woman by the throat and choked her cries; and they led her to the rear—weeping and wringing her hands.

A few minutes later, as the men slipped forward through the woods and mist, they came upon the Flemings crouched in the bushes, and each creeping for a tree. "Gooseneck" John Branham—so called because of the length of his neck—Doc Swindall and Ed Hall opened fire. For

twenty minutes those two Fleming boys fought twenty-two men fiercely.

"Just looked like one steady flame was a-comin' out o' each man's Winchester all the time," said Branham, pointing to two bullet-pecked trees behind which the outlaws had stood. "I was behind this birch," laying his hand on a tree as big as his thigh, and pointing out where the Flemings had drilled three bullet-holes in it between his neck and his waistband.

"I seed Jim Hale pokin' his gun around this hyeh tree and pumpin' it off inter the ground," said Hall, "an' I couldn't shoot for laughin'."

"Well," said Swindall, "I was tryin' to git in a shot from that oak there, and something struck me and knocked me out in the bushes. I looked around, and damn me if there wasn't seven full-grown men behind my tree."

It had evidently been quite warm for a while until Branham caught Heenan in the shoulder with a load of buckshot. Heenan's hat went off, his gun dropped to his feet; he cried simply:

"Oh — you!" Then he ran.

Cal Fleming, too, ran then, and the posse fired after them. The dog, curiously enough, lay where he had lain during the fight, at the base of Heenan's tree—and so hat, dog and gun were captured. I had wondered why the posse had not pursued the Flemings after wounding them, and I began to understand. They were so elated at having been in a fight and come out safe, that they stopped to cook breakfast, gather mementoes and talk it all over.

Ten minutes later, we were at the cabin, where the fugitives had stopped to get some coffee.

"They was pretty badly hurt, I reckon," said the woman who had given them something to eat. "Heenan's shoulder was all shot up, an' I reckon I could git my hand into a hole in Cal's back. Cal was groanin' a good deal, an' had to lay down every ten yards."

We went on hurriedly, and in an hour we struck the main body of the searching party, and as soon as the sheriff saw me he came running forward. Now, the guard at the Gap had such a reputation that any member of it was supposed to be past-master in the conduct of such matters as were now pending. He immediately called me "Captain," and asked

me to take charge of the party. I looked round at them, and I politely veered from the honor. Such a tough-looking gang it has rarely been my good luck to see, and I had little doubt that many of them were worse than the Fleming boys. One tall fellow particularly attracted my attention; he was fully six and one-half feet high; he was very slender, and his legs and arms were the longest I have ever seen swung to a human frame. He had sandy hair, red eyes, high cheek-bones, and on each cheek was a diminutive boil. About his waist was strapped a huge revolver, and to the butt of this pistol was tied a big black bow-ribbon—tied there, no doubt, by his sweetheart, as a badge of death or destruction to his enemies. He looked me over calmly.

"Hev you ever searched for a dead man?" he asked deeply.

It was humiliating to have to confess it in that crowd, but I had not.

"Well, I hev," he said significantly.

I had little doubt, and for one, perhaps, of his own killing.

In the hollow just below us was the cabin of Parson Swindall—a friend of the Flemings. The parson thought the outlaws dying or dead, and he knew the cave to which they must have dragged themselves to die. If I got permission from the old Fleming mother, he would guide me, he said, to the spot. I sent back a messenger, promising that the bodies of her sons should not be touched, if they were dead, nor should they be further harmed if they were still alive. The fierce old woman's answer came back in an hour.

"She'd ruther they rotted out in the woods."

* * *

Next morning I stretched the men out in a long line, thirty feet apart, and we started on the search. I had taken one man and spent the night in the parson's cabin, hoping that, if only wounded, the Flemings might slip in for something to eat; but I had a sleepless, useless night. Indeed, the search had only a mild interest and no excitement. We climbed densely thicketed hills, searched ravines, rocks, caves, swam the river backward and forward, tracking suspicious footsteps in the mud and through the woods. I had often read of pioneer woodcraft, and I learned, during these three days,

that the marvelous skill of it still survives in the Southern mountains.

It was dangerous work; dangerous for the man who should run upon the outlaws, since these would be lying still to hear any one approach them, and would thus "have the drop" from ambush. Once, to be sure, we came near a tragedy. At one parting of two roads, several of us stopped to decide which road we should take. At that moment, the Fleming boys were lying in the bushes twenty yards away, with their Winchesters cocked and leveled at us over a log, and only waiting for us to turn up that path to open fire. As I was told afterwards, Heenan, very naturally, had his Winchester pointed on his hat, which, at that moment, was on my head. By a lucky chance, I decided to take the other path. Otherwise, I should hardly be writing these lines to-day.

For three days we searched, only to learn, or rather to be told, which was not the truth, that, in women's dress the Flemings had escaped over into Kentucky. As a matter of fact, they lay two weeks in a cave, Cal flat on his back and letting the water from the roof of the cave drip, hour by hour, on a frightful wound in his breast.

* * *

For several months they went uncaptured, until finally three of the men who were with me, "Gooseneck" John Branham, Ed Hall and Doc Swindall, located them over the border in West Virginia. Of course, a big reward was offered for each, or they were "rewarded," as the mountaineers say. The three men closed in on them in a little store one morning. Cal Fleming was reading a letter when the three surged in at the door, and Hall, catching Cal by the lapel of his coat, said quietly:

"You are my prisoner."

Cal sprang back to break the hold, and Hall shot him through the breast, killing him outright. Heenan, who was not thought to be dangerous, sprang at the same instant ten feet away, and his first shot caught Hall in the back of the head, dropping the officer to his knees. Thinking he had done for Hall, Heenan turned on Branham and Swindall, and shot Branham through both lungs and Swindall through the neck—dropping both to the floor. This left the duel between Hall on his knees and Heenan. At last a lucky

shot from Hall's pistol struck Heenan's pistol hand, lacerating the fingers and making him drop his weapon. Heenan ran into the back room then, and, finding no egress, reappeared in the doorway, with his bloody hands above his head.

"Well, Ed," he said simply, "I can't do no more."

* * *

Six months later, Heenan Fleming was brought back to the county seat to be tried for his life, and I felt sure that he would meet his end on the scaffold where Talton Hall and Red Fox had suffered death.

As he sat there in the prisoner's box, his face pale and flecked with powder, I could see a sunken spot in his jaw, through which one of Hall's bullets had gone, and his bright black eyes gleamed fire. I stepped up to him. I thought there

was no chance of his escaping the gallows; but, if he did escape, I wanted to be as friendly with him as possible.

"Heenan," I said, "did you ever get your hat back?"

"No," he said.

"Well, if you come clear, go up to the store and get the best hat in the house, and have it charged to me."

Heenan smiled.

Now, by a curious chance, the woman on whose testimony the Red Fox had been hanged had died meanwhile. Some people said she had been purposely put out of the way to avoid further testimony. At any rate, through her death Heenan did come clear, and the last vision I had of him he was riding out of the town on a mule, with his baby in front of him and on his head a brand-new derby hat—mine.

BY-GONE INTERNATIONAL ATHLETIC CONTESTS.

WHAT AMERICANS HAVE ACCOMPLISHED.

By William B. Curtis.

THE eyes and thoughts of American amateur athletes are turned across the Atlantic this summer, and those of our champions who can make the necessary arrangements will visit London and Paris. In several individual cases, there has been doubt as to whether the athlete should represent his college or his club, but most of them will go, under one flag or the other, so that our army of invasion is likely to include the pick of American amateur and collegiate champions and record-holders.

They will first take part in the British amateur championship meeting at London, July 7, and a week or two later meet the athletes of many nations at Paris. There will be grand struggles when the pick of our collegians face the best men of England and Ireland, in London; and it is probable that the victors in this meeting will win almost all the honors at Paris, as European nations are far behind the Anglo-Saxon in athletic culture, and their champions can win few prizes when pitted against the best men of America and Great Britain.

These coming games make it pertinent to review past international contests in

which American amateur athletes have taken part.

In 1844, long before the amateur distinction had been dreamed of here, Geo. Seward, of New Haven, Conn., went to England, beat every man who dared run against him, at all distances up to a quarter-mile, offered long starts to any man living, beat all existing records at running short distances, at skating and at jumping on skates, and finally returned to America, the acknowledged sprinting champion of the world.

Louis Bennett, a Seneca Indian, better known as Deerfoot, went to England in 1863, ran many races at distances near 10 miles, beat all of England's best men, and established records for running one hour and 12 miles, the latter still standing as the fastest in the world. He ran in moccasins, with an awkward stride and a rolling gait, and outraged all civilized ideas of training, but was the best man of his day.

In the spring of 1878 Mr. Charles C. McIvor, of Montreal, Canada, then amateur champion sprinter of America, went to England and entered in several professional races, but proved to be many



A. A. Jordan.

feet slower in 100 yards than the fastest English professional.

The first American amateur to compete in England was probably Mr. Richard H. Dudgeon, a New York boy, who was educated in England, and subsequently engaged in a business which had offices in both New York and London. He was a regular paying member of the New York Athletic Club and the London A. C., and competed in both countries in the colors of either club. He was a genuine amateur and an enthusiastic contestant, ever ready to run against anybody, on short notice, for any prize from a diamond medal to a bunch of toothpicks. His death

left a gap in the ranks of old-fashioned amateurs, who loved sport for sport's sake.

Mr. S. A. Miles, Clifton Albion Harriers, Bristol, England, came to America in 1880, and competed unsuccessfully in the championship meeting. He subsequently settled in this country, joined the Manhattan A. C., and competed in their name.

The first regularly organized invasion of Great Britain by American amateur athletes was in the summer of 1881, when L. E. Myers, Manhattan A. C., and E. E. Merrill, Union A. C., Boston, Mass., went to England and competed in several meetings, including the championships. The credentials of these emissaries were above question. Merrill was our amateur champion and record-holder at walking, while Myers held many running records, and was our champion at all distances from 100 yards to 1,000 yards. Merrill won several races and established new English records at walking one mile and two miles, but fell, exhausted, at four miles, in the seven miles' championship race. Myers was beaten once—the 100 yards championship—but won the quarter-mile championship and established a new world's record at a quarter-mile, and several fresh English records at various distances.

Myers's appearance and methods were

so utterly at variance from English traditions that he attracted special attention, and the critics caviled at his spare form, swarthy complexion, and even the old handkerchief which he habitually wore in place of a cap. English opinion was well illustrated by a sprig of nobility who penetrated the dressing-room, after one of Myers's victories, and came out saying, "'Pon my soul, the fellow is nothing but skin and bones and porous plawsters."

W. C. Davies, of Westminster Chester Rowing Club, came to America in 1881, joined the Williamsburgh A. C., and in their colors won the five-mile championship in 1881, but was beaten for the same honor in 1882. During his sojourn in this country he made many new records in running distances between 14 and 80 miles, and a majority of these performances are still unbeaten.

J. T. Tivey, of Sheepshead Midlands Football Club, came to America in the same year, joined the Williamsburgh A. C., and in its name twice won the 120 yards hurdle championship.

H. T. Macauley, of Cambridge University, visited America in 1881, joined the Manhattan A. C., and in their colors competed unsuccessfully in the shot-putting championship.

In the autumn of 1882, W. G. George, of the Moseley Harriers, England's long-distance champion, who had been prevented by illness from meeting Myers in England, came to America, and contested a triple match with Myers. The half-mile was won by Myers in slow time, the one mile by George, establishing a new American record, and, after a postponement on account of Myers's illness, George won the match by taking the three-quarters mile race in time faster than the best American record. Everybody knew that Myers could win the half and George the mile, and the match really simmered down to one race at three-quarter mile—a tolerably fair com-



F. Westing.

promise distance—a little too short for George, and a little too long for Myers.

In the summer of 1883 W. S. Hart, of the Manhattan A. C., betook himself to England, and competed at various meetings, but was beaten or disqualified everywhere, walking no faster or fairer abroad than at home.

W. H. Meek, West Side A. C., went to England in time for the championship meeting of 1884, and was followed a few weeks later by F. P. Murray, Williamsburgh A. C., and L. E. Myers, A. Waldron and H. Fredericks, Manhattan A. C. Fredericks and Waldron did not distinguish themselves, and although Murray won several races, his style was severely criticised. Meek won the seven-mile championship, and several other races, established many new records, and was unanimously voted the fairest fast walker ever seen in England. Myers did as might have been expected—beat his opponents and astonished his critics. He won a dozen races, established new English records at 500 yards, 600 yards, 800 yards and 1,000 yards, and new world's records at half-mile and 1,200 yards.

In the summer of 1885 L. P. Smith, A. A. Jordan and L. E. Myers, of the Manhattan A. C., visited England and competed at the championship meeting and many club sports. Jordan and Smith were failures, but Myers added still more to his pre-eminent reputation. He won the quarter-mile and half-mile championships, and took first prize in a score of minor races, running a half-mile in less than two minutes five times and a quarter-mile in less than fifty seconds seven times.

A team of Irish athletes visited Canada and the United States in the fall of 1885. R. E. Sproule, Dublin; G. D. Christian, Dublin City and Suburban Harriers, and D. D. Bulger, Dublin University Athletic Club, all sprinters; J. E. Hussey, County Kerry Athletic Club, middle-distance runner and hurdler, and Owen Harte, Wexford Harbor Boat Club, heavy-weight athlete, gained no American laurels. W. J. M. Barry, Queen's College, Cork, won the Canadian hammer-throwing championship, and M. J. Hayes, Limerick Boating Club, the three-mile walk. J. Purcell, Dublin City and Suburban Harriers, won the Canadian championship at running long jump, and took second place in the

American individual all-round championship, while E. J. Walshe, Lansdowne Football Club, won the Canadian championship hurdle race and running high jump, and the same events in the autumn meeting of the New York Athletic Club. Several of these athletes remained in Canada or the United States and competed frequently during the next five years.

H. Whyatt, Nottingham Forest Football Club, an English champion and record-holder, visited America in 1885, and competed unsuccessfully in the one-mile and three-mile walks at the annual championship meeting.

E. C. Carter, of the Bristol Harriers, came to America in 1885, and joined the Pastime A. C., but afterwards transferred his allegiance to the New York A. C. He subsequently won many championships, and established a long list of new records, but never competed in the name of his English club.

J. J. Austin, an English athlete, competed in the half-mile and one-mile runs at the championship meeting of 1886, but wore the colors of the Olympic A. C., instead of his old English club.

In the summer of 1887 five American athletes visited England. One of these five, E. C. Carter, New York A. C., was an Englishman who established an honorable athletic record before emigrating to America; and his subsequent victories, on his temporary return to England, can hardly be added to America's score. H. S. Young, Manhattan A. C., hurdler and sprinter, and F. B. Fogg, Harvard University, high jumper, did nothing worthy of note. E. D. Lange, Manhattan A. C., competed unsuccessfully in half a dozen walking races, and finally finished first in a two-mile contest.

W. Byrd Page, University of Pennsylvania and the Manhattan A. C., was the star of the party. He left home with a sprained foot which kept him out of competition for many days after his arrival in England, but, once at work, he maintained his American reputation, winning various running high jumps at 6 ft. 1 in. (three times), 6 ft. 2½ in. and 6 ft. 3¼ in., the last performance being then the world's best record. In championship competitions he was unlucky, tying with G. W. Rowdon at 6 ft. for the English championship, and with J. W. Kelley, at 6 ft. 1¾ in. for the Gaelic championship.

The disparity in size between this pair afforded much amusement to the spectators, Kelley being over 6 ft in height and weighing 185 lbs., while Page was a scant 5 ft. 7 in., and weighed only 140 lbs.

In the autumn of 1887 three English amateurs visited America. C. G. Wood, a fine specimen of English manhood, was a champion and record breaker at home, but broke down soon after his arrival here, and could not show his real ability. C. W. V. Clarke, Spartan Harriers, won the Canadian three-mile walking championship, but lost two of his four races in the United States and was disqualified in the other two. T. Ray, Ulverstone Cricket and Football Club, was the only successful visitor, winning the American championship pole vault, at 10 ft. 10 in., and other competitions at 10 ft. 11 in., 11 ft. 1½ in., and 11 ft. 4½ in., the last being a new American record. His performances were the first exhibition in this country of the English method of climbing the pole, which is now debarred by our rules.

T. P. Conneff, one of the greatest distance runners that Ireland ever produced, removed to America in 1888, joined the Manhattan A. C. and subsequently the New York A. C., and during the succeed-

ing years won many championships, and made many new records, some of which still stand.

In the summer of 1888 Great Britain was invaded by two armies of American athletes. The Manhattan A. C. sent H. M. Banks, T. P. Conneff, C. W. V. Clarke and F. Westing, while the New York A. C. squad included E. C. Carter, W. C. Dohm, G. R. Gray, A. A. Jordan, W. E. Koos, C. M. Smith and W. C. White. Carter and Clarke, Englishmen, and Conneff, an Irishman, had achieved athletic supremacy at home before emigrating to America and their exploits during this trip cannot fairly be credited to the land of their adoption. Banks, White and Koos did nothing worthy of note. Smith was a busy man, and competed more than twenty times, winning twice only—a running high jump, and a half-mile run. Dohm won minor races at quarter-mile and half-mile, but was beaten in the championship meeting at both these distances. Jordan won a running high jump and three running broad jumps, including the championship, but was beaten for the hurdle championship. Westing won several 100 yards races, including the championship and the international race at Dublin. Gray was an



C. A. J. Queckberner. E. Van Schaick. E. L. Sarre. E. D. Lange. J. S. Roddy.
H. L. Dadman. M. Remington. M. W. Ford. L. H. Cary. H. L. Hallock. C. L. Nicol.



George R. Gray.

easy first in every shot-putting competition he could find, winning the English and international championships, and beating the world's record five times in one afternoon.

The Gaelic Athletic Association of Ireland sent a team of athletes to America in the autumn of 1888. Among the thirty-one members of this party were several fine athletes, such as J. S. Mitchell and J. C. Daly, heavyweights; D. Shanahan, jumper, and P. Davin and J. Mooney, all-round athletes, but the team were ill-advised and stupidly managed; took sides in the existing revolt against the authority of the Amateur Athletic Union; were

thereby debarred from competing in the better class of games, or against the first-class athletes of America; confined their performances almost entirely to gate-money exhibitions. The team finally disintegrated, some working their passage home on cattle-ships, or sailing in the steerage, while several took up permanent residence in the United States. A suit by a landlord for a \$600 hotel bill in New York, and an unsavory squabble at home over \$2,500 of unpaid liabilities, were the final features of this unfortunate enterprise.

In 1889 four English athletes visited America. E. L. Stones, Ulverstone Cricket and Football Club, won the Canadian and American pole-vaulting championships, and returned home. W. T. Young, Spartan Harriers, joined the Manhat-

tan A. C., but achieved little success. S. Thomas, Ranelagh Harriers, competed first for his English club, and subsequently for the Manhattan A. C. He won the American ten-mile championship, and established several new records. A. B. George, Spartan Harriers, a brother of W. G. George, joined the Manhattan A. C., and in their colors won the mile championships in 1889 and 1890.

At the spring games of the London Athletic Club, in 1890, W. Halpin, of the New Jersey A. C., won the running long jump, at 20 ft. 9 in.

In the autumn of 1890, the Manhattan A. C. brought over a team of the Salford Harriers, Manchester, who competed at a series of meetings held in Detroit, Chicago, Buffalo, Boston, Philadelphia and New York City, the games in each city being held on the joint account of the Manhattan A. C., the Salford Harriers and the local club, if there was any profit, but the loss, if any, was borne wholly by the local body. The enterprise was too evidently a gate-money speculation, and if this was not plain enough before, it was made indisputable when the visitors refused to compete at the championship meeting because they could not get a share of the receipts. The tour narrowly escaped being a sad financial failure. In Boston the profits were \$60, and in Detroit \$300, while in Buffalo, Chicago and Philadelphia the receipts fell below the expenses. The redeeming feature was the New York meeting, held in Madison Square Garden, and netting \$3,000, which gave the Manhattan A. C. about \$700 balance on the whole series, and sent the Salford Harriers home with \$47 profit.

Of the five visiting athletes, N. D. Morgan, English 100 yards champion; T. L. Nicholas, English quarter-mile champion, and G. H. Morris, middle-distance runner, proved themselves counterfeits, and no one could understand why they came. E. W. Parry, English cross-country champion for three years, and four-mile and ten-mile champion for one year, won every steeplechase—usually two miles—during his American tour. W. H. Morton, familiarly known as "Sonny," holder of the world's records at 12 miles, and from 15 to 20¼ miles, won six five-mile races in America, his times ranging from 30 minutes 26½ seconds to 26 minutes 23 3-5 seconds.



G. W. Orton.

The Manhattan Athletic Club sent a team of athletes to England and France in the summer of 1891. Of this party A. B. George and W. T. Young were Englishmen, and their performances could not properly be credited to America. H. L. Dadman, middle-distance runner; E. D. Lange, walker; C. L. Nicol, walker; J. S. Roddy, middle-distance runner; E. L. Sarre, sprinter, and E. Van Schaick, pole vaulter, did nothing worth mentioning. M. W. Ford tied for the English championship long jump, and won several minor events. C. A. J. Queckberner won competitions and established new British records with hammer and 56-lb. weight. H. L. Hallock won several high jump competitions, but could do no better than a tie for second in the championship. L. H. Cary won several sprint races, and M. Remington a dozen events, including 100 yards in 10 1-5 seconds, 220 yards in 22 seconds, 300 yards in 32 seconds, 350 yards in 37 3-5 seconds and quarter-mile in 49 2-5 seconds. At the international meeting, held in Paris, France, Victor Mapes, of Columbia University, won the long jump at 22 ft. 5 in., while the Manhattan A. C. team took every other first prize.

At the English championships of 1891 W. M. Christie, Manhattan A. C., finished fifth in the quarter-mile.

H. L. Curtis, Highgate Harriers, came to America in 1891, joined the Manhattan A. C., and competed for them unsuccessfully in the one mile and three miles championships, but established a new quarter-mile walking record before returning home.

A team of athletes from Yale University crossed the Atlantic in the summer of 1894, and competed against Oxford University, July 16, on the Queen's Club Grounds, West Kensington, London. The programme consisted of nine events, and Oxford won by a score of 5½ to 3½. G. F. Sanford and A. Pond, Yale, were third and fourth in the 100 yards run, and the same pair finished second and third in the quarter-mile. W. Woodhull was third, W. E. Morgan did not finish in the half-mile, and Morgan was second in the mile. D. B. Hatch was second in the hurdle race, and E. A. Cady fell at ninth hurdle. L. P. Sheldon tied for the high jump, and Cady was third. Sheldon won the long jump, with Hatch last. W. O.

Hickok and A. Brown were first and second with both shot and hammer.

The training and management of the Yale team were severely criticised, but it is probable that, with every man at his best, the result would not have been different.

John Corbin, a graduate of Harvard University, winner of the intercollegiate half-mile in 1893, and the Yale-Harvard half-miles in 1892 and 1893, entered as a student at Balliol College, Oxford University, in 1894, and competed frequently in collegiate and university sports, with fair success.

During the winter of 1894-1895 arrangements were made for a match between London A. C. and New York A. C., to be contested on Manhattan Field, New York City, Sept. 21, 1895. Each club was allowed to strengthen its party by the election of new members specially for this match, thus making the affair practically a contest between representative teams of English and American amateur athletes. The appointed day found track and field in good condition, weather uncomfortably hot, wind trifling, and attendance 8,592, at prices ranging from \$1 to \$3.

B. J. Wefers, New York A. C., and Lowell, Mass., Cricket and A. C., won the 100 yards, with J. V. Crum, N. Y. A. C., and Chicago, Ill., A. C., third. Wefers also won the 220 yards, with Crum second. T. E. Burke, N. Y. A. C., and Boston A. A., won the quarter-mile, while G. M. Sands, N. Y. A. C., and Union College, did not finish. C. H. Kilpatrick, N. Y. A. C., and U. C., took the half-mile, with H. S. Lyons third. The mile run went to T. P. Conneff, with G. W. Orton, N. Y. A. C., and University of Pennsyl-



L. E. Myers.

vania, second. Conneff also took the three-mile run, while Kilpatrick quit at one and a quarter miles. S. Chase, N. Y. A. C., and Dartmouth College, won the hurdle race, while E. H. Cady quit at fifth hurdle. The high jump went to M. F. Sweeney, N. Y. A. C., and Xavier A. A., while S. A. W. Baltazzi tied for second place, and won by default. E. B. Bloss won the long jump, with L. P. Sheldon, N. Y. A. C., and Yale University, second. G. R. Gray won the shot-putting, with W. O. Hickok second, while the hammer throwing went to J. S. Mitchell, with H. P. Cross, N. Y. A. C., and Y. U., second. Chase's time in the hurdle race, 15 2-5 seconds, was faster than the world's record, but could not be accepted because he knocked over one hurdle. Wefers's 220 yards in 21 3-5 seconds was then the world's fastest record, but has since been beaten by himself, while his 100 yards in 9 4-5 seconds, Kilpatrick's half-mile in 1 minute 53 2-5 seconds, and Sweeney's 6 ft. 5 5/8 in. at running high jump, still remain unbeaten.

The result of the match was most extraordinary. The teams were fairly representative of the athletic strength of either country, and seemed likely to make a good fight, but New York A. C. won every event. And still more wonderful is the fact that if the performances of all of New York's eleven winners had been disregarded, and the score made up as if they had not been present, New York would have still won the match by a score of 6 to 5.

Just two weeks after the New York-London match, on the same field, teams of Yale and Cambridge Universities met in a contest of eleven events, several of the athletes on either side having taken part in the preceding match. The record of the Yale men was as follows: W. M. Richards won the

100 yards run, with R. W. Burnett second; Richards also took the 300 yards run, with D. C. Byers last. Richards and F. E. Wade were second and fourth in the quarter-mile, while P. W. Crane was a poor second in the half-mile. J. E. Morgan was second in the mile, while W. H. Wadhams did not finish. In the hurdle race, American style, E. H. Cady won, with G. B. Hatch second, while in the English style, Hatch won, with Cady third. J. H. Thompson, Jr., won the high jump, and L. P. Sheldon tied for second place, while Sheldon won the broad jump, with R. Mitchell third. W. O. Hickok won the shot-putting, with A. Brown second, and the hammer-throwing went to Hickok, with Cross

second. Yale won by a score of 8 to 3, and also made 7 1/2 seconds against 3 1/2 for Cambridge.

In April, 1896, several American athletes competed in the revived Olympian Games at Athens, Greece. This delegation included no amateur champion and only one record-holder, but proved far better than their opponents, and won almost every



W. H. Meek.

C. L. Nicol.

event for which they entered. T. E. Burke, Boston A. A., won the 100 meters, with F. E. Lane, Princeton University, and T. P. Curtis, B. A. A., unplaced. He also won the 400 meters, with H. B. Jamison, P. U., second. E. Blake, B. A. A., ran unsuccessfully in the 1,500 meters race and the 26-mile road race from Marathon to Athens. Curtis won the 110 meters hurdle race, while E. H. Clarke, B. A. A., took the running high jump, with R. Garrett, P. U., and J. B. Connolly, Suffolk A. C., tied for second place. Clarke also won the broad jump, with Garrett second and Connolly third. W. W. Hoyt, Harvard U., won the pole vault, Connolly the running hop, step and jump, and Garrett the discus-throwing. Garrett also took the shot-



C. H. Kilpatrick.

putting at 36 ft. 9 in., while the revolver and rifle shooting contests were won by two American brothers, sons of Gen. Payne, of yachting renown.

In the winter of 1896-1897, J. L. Bremer, Jr., Harvard University, inter-collegiate champion and world's record-holder at 220 yards hurdle racing, entered Balliol College, Oxford University, and frequently competed in college and university sports. But his favorite game is practically unknown in England, and he was not successful in other competitions.

At the English amateur championship meeting of 1897, W. S. Hipple, New York A. C., ran unplaced in the half-mile, while R. Sheldon, of same club, was second in the shot-putting and third with the hammer.

A year later, W. G. Grace, Knickerbocker A. C., New York City, was last in the running broad jump, and unplaced in the running high jump, while G. W.

Orton, New York A. C., won the two-mile steeplechase championship, finishing 75 yards in front of his nearest English pursuer. His style of taking the various obstacles was a revelation to British athletes.

A year later Orton appeared to defend his championship, but was easily beaten, being in poor condition.

After long negotiations, a match was arranged—Oxford and Cambridge against Yale and Harvard—to be contested on the Queen's Club Grounds, West Kensington, London, July 22, 1899. F. J. Quinlan, Harvard, won the 100 yards race, with F. A. Blount, Yale, third. D. Boardman, Yale, was second in the quarter-mile, with T. R. Fisher, Yale, third. J. P. Adams, Yale, was third in the half-mile, with T. E. Burke, Harvard, fourth. C. B. Spitzer and H. P. Smith, Yale, were third and fourth in the mile run. C. K. Palmer, Yale, was second in the three-mile run, while H. W. Foote and H. B. Clarke did not finish. F. Z. Fox, Harvard, won the hurdle race, with his college mate, J. W. Hollowell, fourth. A. N. Rice, Harvard, won the running high jump, while C. M. Rotch, Harvard, was third. C. D. Daly and J. T. Roche, Harvard, were second and third in the running long jump, while W. A. Boal and H. J. Brown, Harvard, were first and second with the hammer. The English team won by a score of 5 to 4, America's defeat being due to the ill-health and poor condition of T. E. Burke, who was thought sure to win the half-mile, but finished last instead of first. Quinlan's ten seconds for the 100 yards just equals the English record, and Fox's 120 yards hurdle race in 15 3-5 seconds is a new English record.

The records of all these international competitions show that America is well to the front except in long-distance running. The United States will be represented in Paris by men who have not hitherto had an opportunity to test their strength in international contests, but who, in home competitions, have maintained, if not excelled, the high standard hitherto set; and by veterans, among whom will be G. W. Orton, and others who have already proved their position on foreign fields. We may await with complacency the outcome at London and Paris this summer.

UP-STREAM CANOE CRAFT.

By Albert B. Chandler.

THERE is a deeply-rooted myth that a paddling canoe is unfitted for working up streams. The reason of such a mistake rests not so much with the craft as with the canoeist's ignorance of the wiles and ways of rivers. Paddling up-stream looks difficult, but it is quite simple after you know how. You slip from one "soft spot" to another, occasionally finding "dead water," and again into a "back current," and are wafted idly upward. You laugh at the impotent eddyings of the current rushing past, and glide along slowly under drooping branches.

Then, after a week or two of the free life of the woods and water, some evening you come upon a village nestled cosily away between the river-bank and the hills, and you put up at a little summer hotel to rest and to lay in provisions. You meet, mayhap, some dreamy summer girl, with whom for a few days you pass the idle hours, with pleasure to yourselves and profit to the attending natives, until, the river again calling, you return to your true loves, the water nymphs.

Then you live aboard again, and sleep aboard, and occasionally eat aboard, if you are a true canoeist. Your "duffle" consists of but a couple of blankets, gun, fishing tackle, some simple culinary outfit, and whatever extra clothing is necessary to make you presentable; a tent, perhaps, and probably also a few simple but effective nostrums.

Some canoeists add to the rest of their baggage a companion. It is an accessory of doubtful value. The only other man to have tagging along is the inner man, who will ever fall in with your plans, laugh at your blues, sustain your hopes, and swear with you in occasional vexation. Then, too, he never lags behind.

The Wisconsin River is particularly well adapted for the canoe, and of all the days in a cruise of a trifle more than 1,500 miles I remember with greatest pleasure those spent in ascending the stream from its confluence with the Mississippi to Portage City, some 130 miles above.

Though the scenery below the Dells is for the most part rather monotonous, it breathes of a vast stillness; mile after

mile the river runs between banks of unbroken woods, with only once in a half-dozen hours' paddling, a fisherman's hut. A village is three times as rare, while the only sound is the occasional hooting of an owl, or the distant tinkle of a cowbell. It is a noble peace and loneliness through which you move, hushed and dreamy, free of all cares of the world as you work up against a six-mile current, making your twenty-five miles a day.

Sandbars! Yes, it is full of them. God sends them to the canoeist upward-bound. Of whatever form a sandbar may be, it is invariably gnawed off laterally by the current, the result being that instead of tapering to a point out in the channel, it is made to run almost parallel with it in a long, sweeping curve, as a rule slightly, though very slightly, concave. Here the water plays and spins about in tiny eddies, dallying along, forgetful of the onward rush of the main current, and so making "soft going" for the paddler. He must hug close to the bar, even striking his blade occasionally, and after having climbed one rung of his ladder, scan the water for signs of another.

At midday these tell-tales appear a delicate orange streak upon the water, fading out above the sand to a pale yellow; earlier and later in the day they are a murky ochre, and about sundown frequently tinted with pink, and on cloudy afternoons they writhe as long, bluish serpents. But all the capacity to detect and interpret the signs must be acquired by experience—directions would be misleading.

To the veteran, every leaf upon the water tells its story. He looks at the profile of the bluffs, at the contour of the banks, the materials of which they are composed, and reads in each a meaning. Here is the channel, or there, or in the center. The floating foam is one of his most trustworthy informants, but the kingfisher has a word to say, and even the sober log, as it floats sedately past, head-on or broadside, or in undignified pivotings, whispers a hint or two.

Some canoeists of indisputable ability claim to be able to judge of the water by observing the inclinations of trees along

the shore. This has always appeared to me to be finessing of very doubtful value. Their argument is that the trees on the firmer foundations, those consequently overhanging the faster water, will droop more than those which, being rooted less firmly, must maintain a more erect position to avoid toppling over. While there is something in this, so far as my experience has gone I have found that on the more loamy ground the foundations were usually being washed away, that the trees therefore gradually inclined more and more, but seldom fell into the stream, except at flood time, when they were carried away and nothing left to tell the tale.

Besides all these things, the canoeist must look to the wind and the shoals, to chutes and to blind forkings, and remember that the channel is always more or less tortuous, so that he must zig-zag from side to side whether he is upward or downward bound.

At night make sure of suitable camping and anchorage where there is no danger of being run down if afloat, or of being left high and dry; above all, be far enough from the willows to escape the devouring mosquito.

The first night out will, if the camper has just left college or an office, be anything but a bliss of rest and dreams. Morpheus must have known, the first night that I wooed him in a canoe, that I was of the wrong persuasion. He turned a cold, deaf ear.

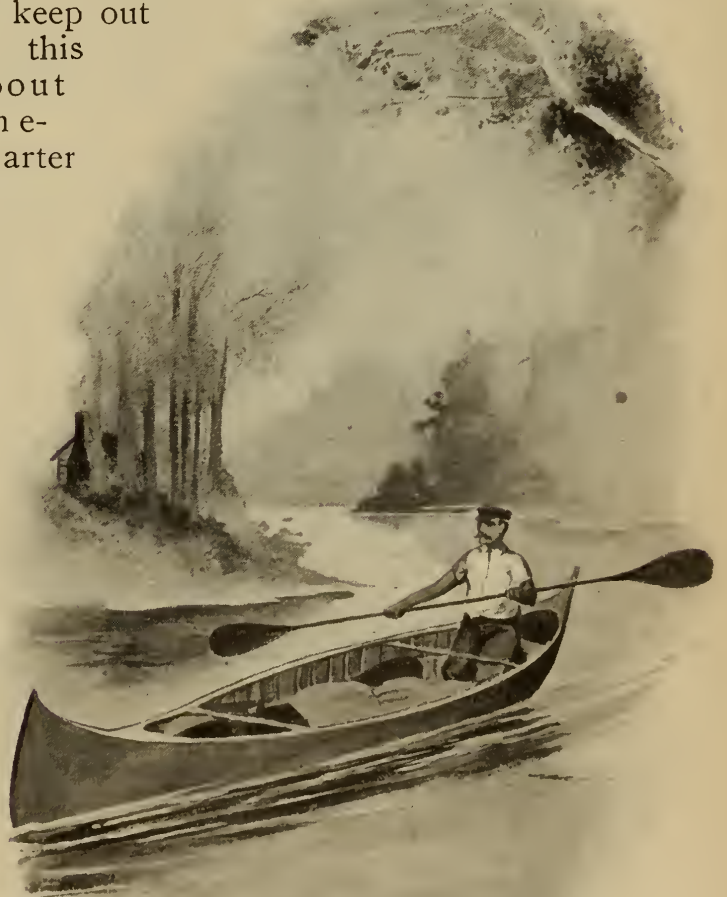
I had made fast to an overhanging branch which, with its sisters, formed a natural canopy. My canoe rocked gently on the lapping wavelets, swaying gracefully to and fro at the end of her tethering, and making a cradle which might have brought sleep to a weather-cock. And I was cushioned well enough, and buried in a pair of mackinacs. But the twenty-eight-inch beam was like a strait-jacket. I kicked, and turned, and tossed. Worst of all, I had wrapped a rubber blanket about me to keep out the river damp. The dew collected on this and chilled me through. I had to learn that the office of the rubber blanket is to act as substitute for a canoe apron. So I gaped and twisted, despite the aching muscles.

How different when one becomes hardened. I believe that the best night's rest I ever enjoyed was after a day's paddling

of seventy-six miles down the Meramec, when, having anchored in midstream—this to avoid the mosquitoes, which are troublesome elsewhere—I fell asleep at a little after seven o'clock on a September evening, not to open my eyes until nine the next morning.

Take the shortest way up and the longest way down, is a very good working rule for a canoeist; that is to say, hug the convex bank while ascending, but while running down stream choose the long way round the outside of the curves, where the water is usually fastest; but, like all such generalities, this and the other hints I shall give are to be understood as having only general application.

For instance, this very working rule must be supplemented with a corollary, for if in the face of a sweeping convexity there is an indentation, you will find back-water there varying in speed directly with the outer current, with which it forms a giant eddy. To avoid shore-slack, it is best to keep out in this about one-quarter



Once in a Half-dozen Hours Passing a Fisherman's Hut.

its breadth. So, hug the short bank upward, but follow its indentations less closely. Naturally, the converse of this will *not* hold on descending, when it is never advisable to come too close to the shore.

The last person to rely upon for trustworthy information, whether as to local currents or distances or routes, is the riparian farmer. Avoid him as you would Lucifer. I remember; in point, one occasion when I asked Hodge which might be the better side of the river to take in, working up toward Port Arthur. The stream was a little more than a quarter of a mile wide, perfectly straight, and restrained on one side by rocky bluffs, but on the other it had a loamy bottom, covered with willows. Naturally, in the absence of other indicators, any one who had acquired a trace of water wisdom would have chosen the course along the lower bank, knowing, as he would, that the bottom loam is an after-deposit proclaiming unmistakably that the brunt of the current is not felt on that side. It is in concordance with the same principle that one will shift his upward course toward that one of two soft banks which is being cut away the less.

In this particular instance the lower bank was perfectly straight, so that there was less opportunity for the river to assault it. So, in taking no account of possible exceptions, I might be misled; especially as on the side of the river farther from the bluffs there was a long train of bubbles, dotted with sticks and blotches of loose foam, which usually follow the deep channel. On the bluff side the water was comparatively free of *débris*. I judged from this that the lower strata of hills shelved out as a shallow bottom well into the stream, as is frequently the case, that the river had plowed a channel just beyond this, and that the main current it must be which was carrying the rubbish. The day was cloudy, merging all the clues of coloration into a dirty monochrome. So, in doubt, I hailed the native.

He told me how often he had rowed his tub-like skiff up the stretch in question; how frequently he toted his daughter, or his wife, or somebody else with him; how he preferred to pull up rather than to walk; and finally assured me that on the bluff side was the only water "fit fer hogs ter tackle."

Judging that this classification might include myself, I clung to the bluff side. If that farmer ever toted up that stretch, may he continue to do so all the length of his days. I question whether he ever did. It was a pull that brought the ache to my shoulders. After about a mile of it I saw on the other shore a gang of men operating a tramp sawmill. Some of the trees they had felled lay with their tops in the water, and this was responsible for the bubbles, for the twigs, and for the foam which had so entirely misled me and induced me to rely on Hodge. I hied myself over to that shore rapidly, found the water comparatively easy, and the lumbermen "easier." They hospitably invited me to partake of lunch, and on my reciprocating by taking from my kit some pickles, "snake medicine" and a box of cigars, we decided that we were mutually agreeable, and quite willing to camp together for a couple of days.

The river plays many pranks with this same scum; yet one by one you come to know all about her little tricks, and delight all the more in foiling her, and in unmasking her petty deceptions. There is a fascination about this water craft. It lends a zest to up-stream work, making it far more attractive than dawdling along slothfully with the current, restless but inactive, while from very ennui you try to keep up to a hard schedule, or else smoke! smoke! smoke!

One ruse that the river never tires of practicing is to send a trail of *débris* dancing along in the slowest part of the stream. The novice is deceived. The only apparatus necessary for performing this piece of jugglery is a wooded island. As the river flows past, caressing its sides, she decks herself with twigs and dead leaves purloined from the drooping branches, under whose combing she adds to her regalia strings of foamy beads. Then, fleeing the island, she gathers up the mementoes from either side, bangles from the isle above. Perhaps she becomes preoccupied in her primping, perhaps the force of the current is broken, or wasted in friction; at all events, a course marked out by such a long trail of flotsam is enervated and emasculated, and the upward-bound canoeist must follow closely the littered path, which is usually his *bête noire*. It is like following pace in cycling.



The Lone Fisherman.

Besides the sandbars and islands in the Wisconsin River there is another feature, which first startles with apprehension, but later becomes the joy of the canoeist. I refer to the artificial dams of timber and stones, met with most frequently above Prairie du Sac. Some extend from shore to shore, leaving in mid-channel only a narrow opening through which the current sweeps, but most of them project like great incisors from only one bank. Few rise above the surface, but almost all come so near that it is impossible to pass over without scraping your keel.

In my first encounter with one of these the dam came off victor, breaking my blade. Fortunately, I had with me an extra paddle, so that I was able to go on my way rejoicing—and keeping an eye out for riffles.

These riffles almost invariably mark the presence of such an obstruction. You see the face of the water warped in a long streak, and a hollow dip at one end where the water rushes as through a sluice. The best plan is to get under the lee of the dam where there is slack water, then paddle up to within twelve yards of the sluice and spurt over. If the dam is deep you will find a slack spot in the very

middle of the opening, about a yard below a point in line with the dam. There is one other such spot about three yards above.

Your task is to raise some six inches yourself, your canoe and your duffle, in a space of a few yards, and to do it in an equal number of seconds—if you are lucky. On your arms it is like “muscling” a heavy weight. Yet it lends excitement, and if you are careful to develop considerable momentum before the rub, you can usually get through on the first trial. Much, of course, depends on the stage of the water. When it is over, and you shoot aside into the dead water, or the eddy above, you may drop your paddle across your knees, lie back, and stretch out your weary arms, while you listen to the restful gurgle of the water below, and dream that you are being wafted gently upward by an undine or mermaid.

In up-stream work a single-blade paddle is, except on occasion, to be avoided. For if you are moving at the rate of two and a half miles an hour, and the stream is slipping backward at, say six or seven, you must drive your paddle at about ten. This jerks you entirely too much for comfort. Besides, having no companions, you lose much of the efficacy of the fine lines of your craft by continually heeling her over; and, furthermore, for all-day, all-week, and all-vacation work, a single blade is entirely too taxing on the wrist and forearm.

Yet I always take one along for emergencies, and in still water I love to use it; in fact, it is then not infrequently preferable to the double blade.

For “bucking” the current, a double blade is the only satisfactory weapon. And it should be a long one—ten or eleven feet—because every inch added will decrease proportionally your body-swing.

This body-swing, by the way, should be economized as much as possible to avoid waste of energy in lost motion. Get your back firmly against the thwart, or, if you use a Rob Roy, against the combing; brace your knees—your shins being crossed like a letter X—against a brace from the gunwales, or the combing in a Rob Roy, and then swing all together—body, boat and paddle. If you do that, and shove the blade clear through with a steady but forceful sweep, you can worry

up a long chute that will give pause to almost any oarsman.

What has been said of short paddles will apply equally well to short canoes. They are hard to steer, and drag. Get a sixteen or seventeen footer—my next is to be seventeen feet six inches, in spite of the fact that it will rarely be used tandem.

It should weigh between fifty and fifty-five pounds, greater weight being superfluous. I believe there is but one American—I know nothing of the foreign makers—who can build a sixteen-footer weighing less than fifty pounds to outlast five hard seasons.

While on the subject of specifications, it may be well to add that for promiscuous use, a cruising paddler must be built very low to avoid windage. If your first canoe is twelve inches amidships, you will be certain to order the second built nearer nine, and you will never be bothered a second time with that pretty frivolity—a tumble-home.

In the early reaches of my seventh night out from Prairie du Chien I sighted a campfire glimmering on the right bank of the river. I made my way thither, and

was hospitably received by a lone fisherman.

"How far t' Portage is it? Seven mile, me boy." And I knew that my up-stream work was ended for the present, and that the next day I should be dreaming down the sluggish Fox.

You can always rely on a fisherman. He is a careless, open-hearted fellow, ready to extend to you the best that he has. I spent the night with this one, as I have with many another.

In fact, the most enjoyable episodes in all my ramblings have been those with the Waltonians. Whether upward or downward bound, you must seek them out. The brightest spot in all my recollections of the campfire is that occupied by a four-days' sojourn with a fishing crew near Nashville, listening to their yarns and their confidences.

And the fishermen will ever remember you, when on your return trips you hail them, as do nearly all your old acquaintances; and you love to renew the former friendships, except, yes, except those with those dreamy summer girls, poor dears, of whom when homeward-bound you had better get out a new edition.

THE GROWTH OF GRINDELWALD.

EARLY ASCENTS OF THE JUNGFRAU—OLD LEGENDS OF THE GLACIER PASSES.

By Francis Gribble.

THERE is no mystery about Grindelwald nowadays. You go there luxuriously in a train; you stay at one of the best hotels in Europe; you come across people whom you know. In the summer you can attend a conference of ministers of religion; in the winter you can skate on a rink. At any season you may meet Mr. Coolidge, of the English Alpine Club—nephew of Miss Brevoort, the famous American woman mountaineer—who has left Oxford to live there. But this is a very modern state of things. One has not to go back a hundred years to find Grindelwald an obscure show-place to which travelers came only in ones and twos; one has not to go much farther back to find its few rare visitors regarding themselves as explorers, who had done something worth talking about for the remainder of their lives. Let us trace the growth of Grindelwald.

In a sense the history of the valley goes well back into the middle ages. The subject can be "worked up," as Mr. Coolidge has judiciously observed, from that learned publication, *Fontes Rerum Bernensium*. But the information to be extracted therefrom does not amount to much. Certain feudal lords gave the valley its first inhabitants by settling their serfs there, and then sold their rights over their serfs to a monastic house at Interlaken. The monastery was suppressed at the Reformation, and its jurisdiction taken over by the Canton of Bern. But these political changes probably meant very little to the individual villagers. Under all the rulers alike each one had his little bit of property—a chalet, and perhaps a field or two—and a right of grazing beasts and cutting wood upon the common lands. The villagers had no history of the sort that gets into the his-

tory books, and no visitors, except presumably priests and tax collectors, until the days when learned men—mainly professors from the Universities of Zürich and Bern—began to take an interest in the glaciers.

The first writers to "take up" the glaciers were the poets. Silius Italicus is the great example. He treated the subject very vaguely, however, as one would expect a poet to, and he does not mention Grindelwald. Another poet who approaches the subject without going into it very carefully is Pastor Rebmann, of Guttannen, on the Grimsel road. If he does not mention Grindelwald, he at least mentions some of the mountains of which Grindelwald is the center. His poem, published in 1605, is a dialogue between two mountains—the Niesen and the Stockhorn—and one of these eminences tells the other of a certain "lost pass" in the neighborhood of the Scheideck, the Jungfrau and the Vischerhorn.

On the whole, however, the poets do not count, and the real history of Grindelwald, and of the Oberland generally, can be got only from the professors.

Which was the first professor to visit, or to turn his attention to Grindelwald, it is difficult to say; but one may say, with rough accuracy, that the professors of the sixteenth century knew nothing about the place, and that the professors of the seventeenth century nearly all visited it. In 1574 Prof. Josias Simler, of Zürich, wrote a big book about the Alps—*De Alpibus Commentarius*—with special reference to the glaciers and the snow passes, and mentions neither Grindelwald, nor any place nearer to Grindelwald than the Grimsel on the one side, and the Gemmi on the other. On the other hand, from about 1642 onwards we find an unbroken succession of professors going to Grindelwald, and reporting their experiences: Matthew Merian, in whose *Topographia Helvetiae* we find the earliest-known view of Grindelwald, reproduced, in 1642; an anonymous correspondent of the Royal Society in 1664; J. J. Wagner, the compiler of the first real Swiss guide-book in 1680; Prof. Hottlinger in 1703; Prof. Scheuchzer, a Fellow of the English Royal Society, and a friend of Sir Isaac Newton, in 1705; and William Burnet, the Bishop's son, in 1706, etc.

As to the nature and origin of glaciers, some of these learned men held truly remarkable opinions. Some of them declared that glacier ice was the same thing as crystal; others that it was the same thing as ordinary ice "with the water squeezed out of it;" and one philosopher went so far as to give out that if the glacier ice were powdered and mixed with wine, a valuable astringent medicine resulted. They also observed that glaciers moved, and made rough guesses at the causes of their movements; but as they guessed wrong, and did not test their guesses by experiments, there is no need for us to follow that branch of the subject any further.

After the professors who were curious about glaciers came the professors who were interested in topography. The most notable of them are Prof. J. G. Altmann and Prof. Gottlieb Sigmund Gruner, both of the University of Bern. Gruner is the greater man of the two—or, at any rate, he wrote the more important book, *Die Eisgebirge des Schweizerlandes*, published in 1760. He really seems to have set himself the task of getting to know all that was to be known about the glacier regions of the Bernese Oberland. He drew freely upon the writings of his predeces-



The Lower Grindelwald Glacier.

sors; he solicited information from every traveler of his acquaintance, including the poet, Haller; he traveled himself, and gleaned traditions of old glacier journeys among the peasant folk.

There are not very many of these, but some are rather interesting. We have a story of a shepherd who was guided over the Lotsch-Sattel by a ghost; we have a story of miners employed at Lauterbrunnen who made a passage of the Wetter-Lucke in order to go to mass; we have a story of a shepherd who crossed the Strahleck—"he traversed the most frightful valleys of ice, and was in peril of his life at almost every step." And there is this thrilling story:

"During the Civil War in 1712 three inhabitants of Grindelwald were taken to the Valais as hostages; their only way of escape was over the glaciers, and their necessity taught them to scorn the dangers of this unheard-of journey. On the Valais side they got to the top of the mountain without much difficulty; but on the Grindelwald side they encountered nothing but mountains of ice. Every step they took they had to cut in the ice, and they were obliged to labor day and night that they might not die of cold. After infinite difficulty and danger they arrived, half dead, at Grindelwald and were presented to the magistrates by their compatriots as men risen from the dead."

So much for legend. Gruner himself does not seem to have been very sanguine that loose talk about glacier passes would ever be succeeded by accurate topography. He speaks of "a chain of valleys of ice which is at present unknown and probably will ever be so." But the age of the climbers was about to begin, and, when it began, to clear up many Alpine mysteries.

Climbing began, it is true, rather later in the Bernese Oberland than in some other neighborhoods—later, at all events, than at Chamonix or in the Tyrol; but it ultimately started with rather a flourish of trumpets. At the time when things were quieting down after the wars engendered by the French Revolution, certain Swiss mountaineers seized the opportunity of launching an Alpine journal; it was called *Alpina*; it was edited by Count Ulysses von Salis, and printed at Winterthur. It opened with a challenge to climbers, reminding them that Mont Blanc

and the Gross Glockner and the Ortler-Spitze had been ascended, and wanted to know why the same compliment had not been paid to the peaks that tower above Grindelwald. Before very long the reproach had been removed.

Von Salis himself was a mountaineer of sorts, though he made no big ascents, and he continued Prof. Gruner's work of collecting local legends of early mountaineering. He has a story of some "determined hunters" who reached the top of the Silberhorn, found another hunter's knife there, and brought it down as a trophy of their prowess. He has a still more thrilling story of an alleged ascent of the Eiger by an Englishman, who "had perished in attempting to reach the highest point, had actually gained it, and had lighted upon the summit, either as a sign of his triumph or as a signal of distress, a beacon fire, and had never been seen again by human eyes."

The story is obviously untrue. A solitary climber could not carry wood for a bonfire to the top of the Eiger, and he certainly would not find any fuel there awaiting his arrival. Let us pass on, therefore, to the first authentic climb of note, done by the brothers Meyer.

No less than three generations of the house of Meyer had a notable connection with the Oberland Mountains. Johann Rudolph Meyer the First drew maps of them, though the practical researches on which his cartography depended were mostly done for him by a German—Herr Weiss, of Strassburg, who made the first passage of the Oberaarjoch in 1795, lost his way on the glacier, and had to spend a night in a crevasse. Then came the first Meyer's sons, Johann Rudolph and Hieronymus. By profession they were the managers of a silk ribbon factory at Aarau; but they desired, as they put it, to "learn the relations between the various vast basins of eternal snow," and to "ascertain whether the peaks which rise out of them could be reached." They found that the peaks—or some of them, at all events—could be reached. In August, 1811, after wriggling astride along a narrow *arête* of ice, with the Lauterbrunnen Valley on one side of them and the snow-field at the back of the Mönch on the other, they got to the top of the Jungfrau. When they got home, their friends refused to believe their story. So

they took Johann Rudolph's son Gottlieb with them and climbed the mountain again in 1812; and then they went on, and in the same year made the first ascent of the Finsteraar Horn.

It is not, however, the professors, or even the mountaineers, who have made Grindelwald what it is. That distinction belongs to the tourists. Let us glance at a few of them.

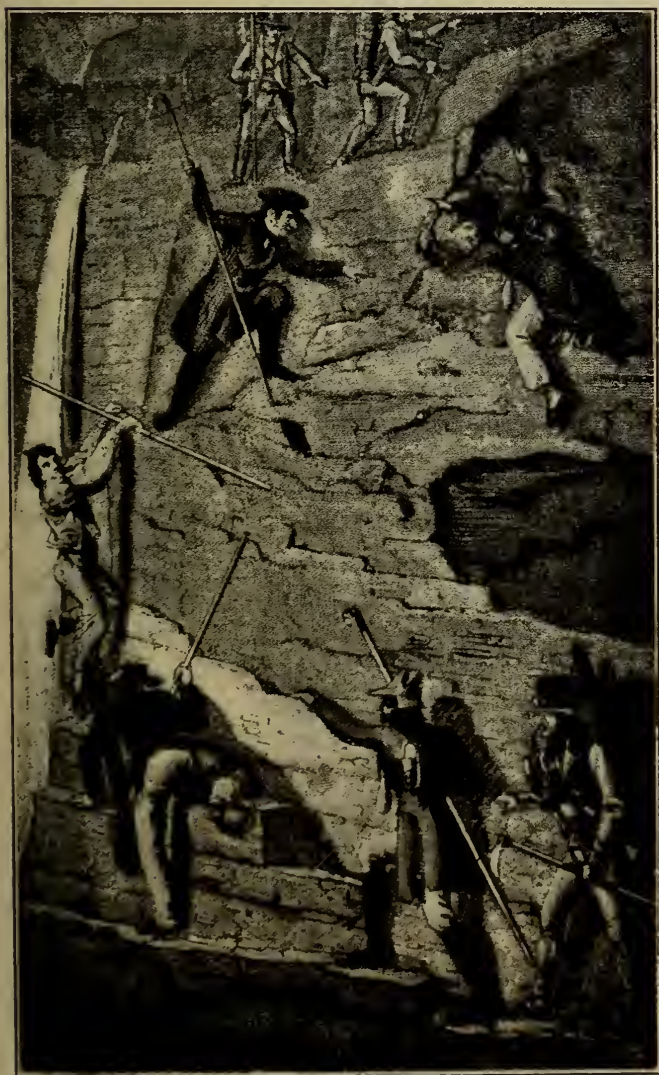
Nothing is more certain than that the early Swiss tourists, when they were not men of science, did not think it worth their while to go to Grindelwald. Ludlow, who was at Bern about 1660, does not mention the place, having other things than the glacier to occupy his mind. Good Bishop Burnet, who was there in 1685, is similarly silent; even the view of the glaciers from the terrace seems to have escaped his observation. Addison, indeed, remarked the view as "The noblest summer prospect in the world," but showed no desire to inspect

it closely, and went away under the ludicrous impression that the range of mountains he had admired belonged to "The Country of the Grisons." Gibbon tells us that the fashion of "reviewing the glaciers" had not begun at the time of his first Swiss tour, and by the time the fashion had begun the historian of the "Decline and Fall of the Roman Empire" was too corpulent to follow it with advantage.

Exact dates cannot, of course, be given; but we shall not be far wrong if we say that this habit of "reviewing the glaciers" entered upon its vogue at about the time of the American Declaration of Independence. It was a very small vogue to begin with; the tourists were but few in number; the accommodation was quite bad. One hears complaints that the Grindelwald innkeeper charged exceeding high prices for poor fare, and one finds the tourists advising each other to lodge with the pastor, "who is the most civilized man in the place, and acquainted with all the best guides." But the fashion was set; tourists turned up in gradually increasing numbers; colored views of the glaciers spread the fame of the place; guide-books began to deal with it.

The first of all the Grindelwald guide-books was *Instructions pour les Voyageurs qui vont voir les Glaciers et les Alpes du Canton de Berne*, by Pastor Wytténbach, published in 1777. It is very rare, and copies of it are hardly to be found; there is none in the British Museum library. Much more common, though hardly less interesting, is Ebel's Guide. Before Murray and Baedeker it was the Swiss hand-book; and it passed through several editions in German, French and English, in 1793, 1804, 1809, 1810, 1818, and later years. From the 1818 edition we gather that "an immense number of travelers came every year" because they "find nowhere else an opportunity of viewing the wonders which the glaciers exhibit more conveniently and with less danger." But we also gather that, in spite of the immense number of travelers, "there is only one inn at Grindelwald:" however, "when it happens to be full, travelers are treated with hospitality at the parsonage house." The 1823 edition tells us of two inns; and there were still only two when Agassiz went there in 1829.

Most of the tourists who slept in those



Early Mountaineers of the Jungfrau.

From the frontispiece of "Naturhistorische Alpenreise" von F. J. Hugli, 1830.

inns must, of course, have been people of no importance; but there are names among them that one knows. "The illustrious de Saussure" went there, for example, attended by the faithful Bourrit, self-styled "Historian of the Alps." It is upon Bourrit's word that the early Grindelwald innkeeper's evil reputation rests; he also complains that the guides are very unenterprising compared with the guides of Chamonix. Frederika Brun, the Danish artist, went there, accompanied by the Swiss philosopher Bonstetten, whom she was very much in love with, though she had a husband living at Copenhagen. So did Escher, the

One cannot quote from all of them. Perhaps it is most worth while to quote from Guibert, who had a poor opinion of the glaciers.

"I have seen," he notes in his journal, "all the glaciers I ever want to see. I will not tell you, as most travelers do, that I ascended the glaciers with difficulty and danger, that I repented a hundred times of my rashness, that I had crevasses 1,500 feet deep in front of me, and that I heard subterranean noises like the rumbling of a volcano. That is what you read in almost all the books of travel, but you will not read it in mine. All that I saw was the glacier quietly melting and the water



The Snow Peaks from the Grindelwald.

famous engineer, who built the Linth Canal. So did Prof. Martyn, the Cambridge botanist, who wrote the first account of de Saussure's climbs, in English. So did the Venerable Archdeacon Coxe, whose "Travels in Switzerland," five times reprinted between 1789 and 1808, was long reckoned the standard English work upon the subject. So did Raymond de Carbonnière, the pioneer of the Pyrenees, who translated the Archdeacon's book into French. So did Ebel, the guide-book man. So did General Guibert, famous not for his feats of arms but for the fact that Madame de Staël was once in love with him. So, at a later day, did Lord Byron.

trickling away drop by drop. And I saw it quite at my ease, sitting on a block of ice, as safe as if I had been in bed. As for the aiguilles, the pyramids, the prisms, the crevasses, the dazzling variety of the tints, you can see all these phenomena on a small scale in the first big snow drift that you come upon in a heavy winter."

It is sad Philistinism; but Guibert is the only complete Philistine among the tourists of his period. Byron's impressions are widely different, though he did throw snowballs in the shadow of the Jungfrau.

"Arrived at Grindelwald; dined, mounted again, and rode to the higher glacier—like a frozen hurricane. Star-

light, beautiful, but a devil of a path! Never mind, got safe in; a little lightning, but the whole of the day as fine in point of weather as the day on which Paradise was made. Passed whole woods of withered pines, all withered; trunks stripped and barkless, branches lifeless; done by a single winter—their appearance reminded me of me and my family.”

And so forth—most of the metaphors of the diary turning up in the drama of “Manfred.”

But here we must leave the subject of the growth of Grindelwald. After By-

ron, the notable names come too thick and fast to be enumerated: Desor, Agassiz, Hugi, J. D. Forbes, G. Studer, Berlepsch, John Ball, Wills, Tyndall, Tuckett, Leslie Stephen—these are but a few notable names picked out at random. Their period was the period when the place was growing, and the passes were being explored, and the new hotels were supplanting the old ones. They preceded the period of the conference and the lectures, when Grindelwald was to become—what it is to-day—the Brighton of the Bernese Oberland.

PRACTICAL FLY CASTING.

Overhand
Cast,
Forward
Movement.

LESSONS IN

By John Harrington Keene.

Over- and
Cast,
Backward
Movement.

THE observant angler who has been present at any of the considerable fly-casting tournaments of the past fifteen years, and noticed the admirable performances of many of the competitors, cannot but have been struck by their value as a means of education to the fly-fisherman. Why the interest in such exhibitions seems to have fallen off of late is not easily apparent, and is to be deplored.

The expert casting of the fly, which is one of the chief accomplishments of the angler, should be most assiduously cultivated, and emulation in this, as in all manly sport, is greatly to be desired. The prime value of such competitions lies in the reproduction of conditions which confront the angler on lake and stream. Every fly-fisher knows the various difficulties which beset him, and make his success a triumph when overcome by the deft handling of the rod and line.

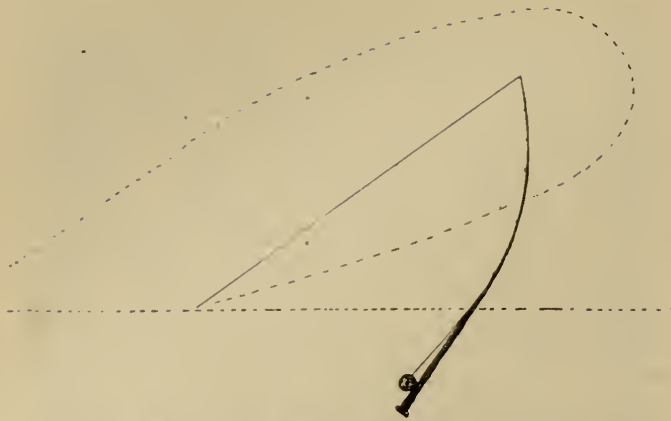
If the distance between an angler and the spot he wishes to reach be great, and the way behind him be clear, he uses the overhand cast; and, assuming he is an expert, his line falls straight and with precision exactly where he wishes to lay it. When the banks are overhung with brush and low-spreading branches, the artful underhand cast may be made with effect.

If trees or rocks be immediately behind, preventing the line extending in the rear, the switch cast is resorted to, and

this complicated but beautiful evolution carries out the line in a series of rolling loops to the desired spot, without requiring more than a few feet of space behind the caster.

Only those who have mastered the switch can fully appreciate its efficiency on a salmon pool surrounded by high and rocky walls. I have seen a seventy feet cast of the switch kind made when a rock wall of a hundred feet was rising within six feet of the angler, and right at his back.

Under the seal and authority of Major Traherne—probably the premier salmon fisherman of the century—the making of the switch cast may be thus described: In making the switch the line is not lifted out of the water in the first instance, as it is when casting in the ordinary fashion, in which the result would probably be that the fly would either get hung up in the trees or smashed on the rocks. What the angler therefore has to do is to lift the line to the surface of the water by raising the point of the rod, and then drag it through the water in the direction he is standing, carrying the point of the rod behind him as far as such obstructions allow. Then by a sudden down-cast of the rod, the line, as yet having been allowed to rest on the water in front of him, is propelled by just so much force as the length of cast requires. During



Underhand Cast. Dotted lines show movement of fly through the air.

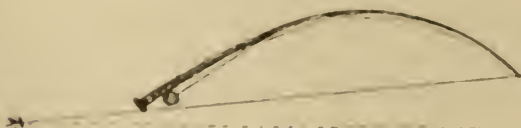
this process the fly has not been lifted out of the water till the very last inch of the line has preceded it. Whilst the line is propelled it will thus be made to assume a shape somewhat similar to that of a wheel, which diminishes in size as it rolls on its track, beating the surface of the water. The coil, or "loop," as it is commonly called, naturally vanishes at the point the fly reached when the cast is completed.

The Spey cast is rather different, but in many ways equally effectual and useful in like conditions. To make a long Spey cast, the fly-fisher requires a rapid stream to work in, which will, before making every fresh cast, carry his fly down-stream to the full extent of his line, taut and straight, the point of the rod be-



Wind Cast. Upward movement.

ing held as low as possible for that purpose. Then by suddenly raising the rod very high the line is lifted out of the water to the extreme end; and without a moment's pause the rod is carried up-stream to the left or right (as the case may be) by a rapid motion, but not so rapid as to send the fly too far up-stream past the angler, the object being to let the fly strike the water just above where the angler is standing, at which moment the whole of the line is on the reverse or up-



Flip Cast.

per side of him. Then with a sweep the line is propelled over—not *along* the surface of the water—after the manner of the ordinary overhand casting.

The wind cast is a modified switch cast, but more simple in its movement. The angler draws his line nearly to his feet, and gives a vigorous downward thrash, which throws the line in a long roll against the wind.

The flip cast is made by taking the fly between the thumb and finger (beware of the hook point!); then bending the rod as a bow, holding a few coils of the line in the fingers of the right hand, which grasps the rod, and letting go of the fly suddenly in the direction required. This cast is especially serviceable when some obscure point is to be reached underneath overhanging branches.

Of course, the neater and more precise each manipulation of the rod is, the more surely is the fly-fisherman rewarded. Good workmanship in angling dignifies fishing into an art, and the satisfaction of the good workman is always in proportion to his skill. Fly-casting is the hardest of the lessons the tyro has to learn, and it is surprising how few there are even among devoted fly-fishermen who are really good fly-casters.

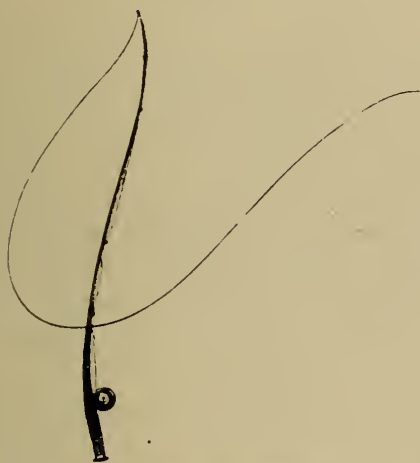
Although the basal overhand cast of the fly has been described most fully by such deans of the craft as Stewart, Francis, Pennell, Halford in England, and Green, Hallock, Wells, and many others in this country, I am tempted to add one more simple description of my own practice; and I do it with the more assurance because I find that even experts need reminding at times of the really right way to make this cast. It may be briefly thus described: Advancing to the side of the stream, with the right or left foot forward, the angler stands facing down-stream, and drops the fly in the running water. Holding the rod firmly grasped in the right hand, with the thumb uppermost, he draws a few feet of line from the reel with his left hand. A smart jerk of the rod lets out the loose line, and this is repeated with line drawn from the reel till some thirty or more feet is trailing in the water.

He then raises the point of the rod until the angle it assumes is about 70 degrees; then with a swift and increasing movement of the rod, he urges the line



Switch Cast. First Movement.

back over his head or left or right shoulder, according to the wind, till the length of line is fully extended behind him. This must be done without jerking the rod, but forcefully and with accumulating speed, till the psychological moment of the extreme limit of the line behind is



Switch Cast. Second Movement.

reached, which will be felt on experiment after a few trials. At this point when the line is straight out behind and poised and about to descend to the earth—exactly then—the forward impulse is made, and the rod brought forward with a strong and accelerating movement to an angle

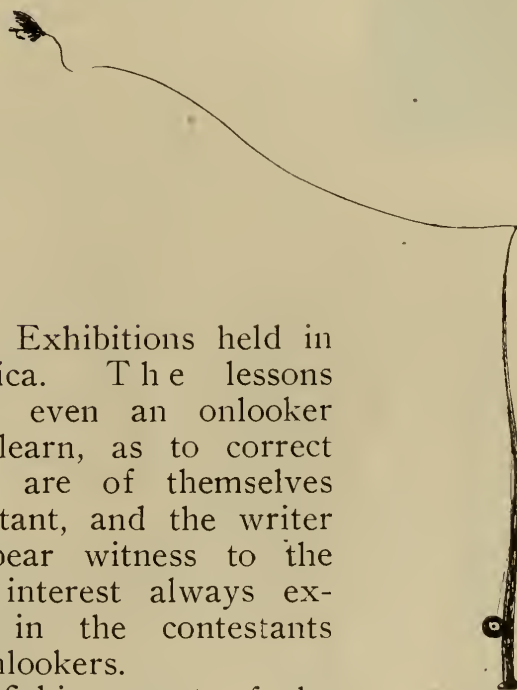


Switch Cast. Third Movement.

of the rod and water of about 40 degrees. The result should be a clean cast, with the fly falling one imperceptible moment before the snell leader and line. If, however, the psychological moment be anticipated ever so little, the caster will hear a

sharp, snapping sound, and will find he has whipped or "popped" off his fly. If it be missed and the forward movement delayed, the cast will be ungraceful and probably fall in a tangle. The arm should not be waved; the motion is from the wrist only.

Casting on a well-mown lawn is excellent practice, and in such case the barb of the hook should be broken off, if one would avoid hooking a promiscuous ear or other prominent feature of an admiring friend. Impromptu tournaments of this kind are very frequent in England, and in the more settled form of competitions between experts they have, with considerable success, been introduced into the programmes of the recent Sports-



Switch Cast Complete.

men's Exhibitions held in America. The lessons which even an onlooker may learn, as to correct form, are of themselves important, and the writer can bear witness to the keen interest always excited in the contestants and onlookers.

In fishing most of the average trout streams of this country it is usual to cast down-stream. On the slow-flowing chalk-streams of Britain, the down-stream anglers would have little sport, and I have found it an invariable rule that when one can fish up, and not down, the former is far more productive. With the floating flies no movement should be imparted to the lure, but with the ordinary standard flies a slight tremor should emanate from the rod tip, so as to simulate the struggles of a live insect. One hint more: If the fly becomes entangled in the weeds or water-grass, or other submerged obstruction, don't pull up against it, but go below, and pull down-stream. It will invariably yield to that treatment.

THE AMERICAN DERBY.

THE LAWRENCE REALIZATION: ITS RELATION TO THE AMERICAN TURF—
ITS HISTORY AND ITS HEROES.

By W. H. Rowe.



The late
Mr. J. G. K. Lawrence.

THE Lawrence Realization, which has become the *pièce de résistance* of the Coney Island Jockey Club's Fourth of July programme, has taken a most prominent rank among the classic races of the American turf, despite the fact that it is one of our comparatively youngest events.

The history of our three-year-old fixtures is a most entertaining study to the true lover of the thoroughbred, albeit a faithful review of their careers—were such a source of procedure permissible at this time—would inevitably lead to the conclusion that the American turf in the last decade has in no other department strayed so markedly from the true path as in its unmistakable and undisguised tendency to tamper with these old landmarks by curtailing their distances, amending their weight conditions, or entirely abandoning them.

Of the score or more of three-year-old classics which were established in the "sixties" and "seventies," it is exceptional to find one that is to-day decided over its original distance or under its original weight conditions, if, indeed, it is decided at all. That this is an unfortunate feature for the welfare of the turf needs little or no demonstration here, for it certainly is obvious that the great classic races are its very bone and sinew.

Take away from England her Two Thousand Guineas, One Thousand Guineas, Derby Oaks and St. Leger, and the English three-year-olds would in a great measure lose their pre-eminent and significant position among the world's equines. They would be deprived of the opportunity to demonstrate just which individualities and just which lines and combinations of blood are superior under the conditions which prevail in their respective years.

As has already been noted, the Ameri-



Hamburg.

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can three-year-old classics have of later years been tampered with, until they have in a great measure lost their identity and earlier significance. At the same time, the American turf has always been somewhat unfortunate in that it has never possessed any such distinctly classic races as England has for over a century claimed in her Derby, Oaks and St. Leger.

In our earlier days there were a number of meritorious three-year-old events. In latter years, too, the West had its Kentucky Derby, Kentucky Oaks, Clark Stakes, St. Louis Derby, Charles Green Stakes, Latonia Derby, Hindoo Stakes, American Derby and other fixtures of genuine merit, while the East had its Withers Stakes, Ladies' Stakes, Belmont Stakes, Carlton Stakes, Brooklyn Derby, Tidal Stakes, Coney Island Derby, Lorillard Stakes, Monmouth Oaks, Travers Stakes, Kenner Stakes, Jerome Stakes,



Salvator.

Dixie Stakes, Breckenridge Stakes, etc., etc. But of all this strong array of high-class races, which three could be confidently selected as representing to America anything like the vital relationship and distinctive supremacy that the Derby, Oaks and St. Leger exercise over the turf in England?

It may be granted, for sake of argument, that the natural conditions in America are somewhat against any such centralization of affairs as easily obtains in England, one turf government and one general policy being readily operative in the confines of the "tight little isle." Our East and West, it may be claimed, are too far apart to have one common classic or series of classics. This is doubtless a reasonable contention. But, granting it, let us then turn our eyes westward in a search for a distinctly supreme Derby classic among the above-enumerated and other fixtures. Do we find it? Or do we find it in the East? Has either section ever possessed a genuinely distinctive Derby, a genuinely distinctive Oaks, or a genuinely distinctive St. Leger?

The Coney Island Jockey Club has from its very foundation been one of the most thoroughly progressive of American racing associations, and to it our turf owes some of its most happy latter-day fixtures. In the spring of 1880 it promptly established two high-class three-year-old events, which in virtually every respect conformed to the English Two Thousand Guineas and Derby. These were the Tidal Stakes and the Coney Island Derby, neither having penalties nor allowances other than the customary concessions for sex. The Mermaid Stakes for fillies was also made a spring fixture, and these three stakes were the club's leading three-year-old spring races until 1884, when the Emporium was inaugurated. This race, at a mile and a half, was based upon a most clever arrangement of penalties and allowances which gave it a semi-handicap nature,

and its five annual runnings were thoroughly successful.

It is necessary now to revert to 1886, in which year we find the Coney Island Jockey Club announcing two novel events which at once captured the fancy of both horsemen and public.

The first of these, most aptly named the Futurity, was for two-year-olds of 1888 who were to be nominated *in utero* for the race, and, as we all know, this event has been the most valuable American turf prize of each succeeding year. The second of the 1886 announcements—and with this we at last reach our subject in real earnest—was that of the equally well-named Realization, for three-year-olds of 1889, for which the embryo racers could be entered when either foals or yearlings.

This race naturally caused the abandonment of the Coney Island Derby and the Emporium in 1889, and has since been the distinctive three-year-old feature of the Coney Island Jockey Club's June meeting, at the same time ranking in genuine interest and importance with any three-year-old event of the American turf. Indeed, as a matter of fact, the Realization has not only retained all the importance

which pertained to it at its inception, but has grown in popularity and significance until it is to-day the three-year-old event which appears most likely to become to American racing what the Derby is to English.

That it does in a measure still fall short of this really ideal position is nevertheless undeniable; and, if one were asked to suggest a change of policy in order to make the Realization the genuine Derby race of the American turf, the recommendations would inevitably call for at least a modification of the weight-conditions which should grant no allowances

other than those for sex—or, possibly, a moderate breeding allowance.

As to the value of the race, while no one can justly accuse the Coney Island



Mr. Belmont.

Mr. August Belmont and his Trainer, Hyland.

Jockey Club of anything like parsimony in the endowment of its stake features, it nevertheless seems obvious that the present addition of \$5,500 might well be doubled or even trebled in view of the tremendously-increased world-wide interest which would pertain to the race were it installed unequivocally as the Derby of America.

The distance which the Realization candidates are required to run—one mile and five furlongs—is a furlong longer than the English Derby, but this is in no way inappropriate, the Realization being run some five or six weeks later than the English blue ribbon. Indeed, it would be unjust to fail to note that the Coney Island Jockey Club has certainly demonstrated a genuine appreciation of the Realization's high mission by maintaining its original distance in the face of the retrogressions in so many others of our American three-year-old fixtures. It is positively beyond cavil that this foremost of American racing associations fully merits the present importance which so unmistakably attaches to the Realization and others of its famous annual fixtures.

Another feature, which it would be as unjust as it is impossible to pass by, is the touch of sentiment so appropriately expressed by the recent addition of the word "Lawrence" to the Realization's title, for in no other manner could a more appropriate or lasting tribute of appreciation have been paid by the club to its departed secretary, Mr. J. G. K. Lawrence, under whose administration the now famous Suburban Handicap, Fu-



Mr. John A. Hunter.



Mr. J. H. Bradford, Treas.
Coney Island Jockey Club.



Mr. James R. Keene.

turity and Realization—comparative or virtual innovations at the time—were devised and promptly placed upon a firm basis. As has been intimated, the Lawrence Realization is annually growing in popularity and significance, and were one to-day called upon to name the fixture which gives promise of eventually becoming the distinctive Derby of America, the great event of the Coney Island Jockey Club's Fourth of July programme would appear to be the wisest and most likely choice.

The heroes of the Lawrence Realization may, in no unnecessarily strict sense, be regarded as those animals which have won its annual renewals; and yet when studied with reference to their rightful claim to consideration as genuine heroes among the thousands of their contemporaries, several of these victors can hardly be included in a strictly championship or semi-championship rating. The great race would have developed a marvelous array of heroes, however, could its successive winners have measured up to the class of its inaugural victor, Mr. J. B. Haggins' Salvator (by imp. Prince Charlie out of Salina), who proved himself a genuine champion on that memorable day in 1889 by bearing his burden of 122 pounds across the finish line in advance of Mr. D. T. Pulsifer's Tenny (imp. Rayon d'Or—Belle of Maywood), conceding the latter no less than thirteen pounds by the special conditions of the event. It is true that the separating margin between the colts was exceedingly small, "a nose" is the official record, but the feat was



The Friar.

Photo by E. Marx.

genuinely heroic in view of the winner's disadvantage in the weights. It is by no means certain that subsequent renewals of the Realization have developed Salvator's superior—if, indeed, his equal. Speed and stamina, size and quality were grandly combined in the superb champion of the "orange, blue sleeves and cap;" and it is nothing to the detriment of the

(imp. St. Blaise—Susquehanna), who had won the Futurity of 1890 for his owner and breeder, the late Hon. August Belmont. So severely was the magnificent chestnut colt suffering from the feet troubles which characterize his close female descent, that it was only his splendid class and tremendous pluck which enabled him to win by an exceedingly narrow margin from the light-weighted Montana. Potomac's subsequent career should never be urged against his claims to genu-



Potomac.

Photo by E. Marx.



Requital.

Photo by E. Marx.

inely championship form, for he was then little more than a patched-up horse who really should have been retired on purely sentimental grounds.

Mr. Marcus Daly's Tammany (Iroquois—Tullahoma) was the Realization hero of 1892, scoring for the "copper, green cap" (under which Mr. Daly was racing in those days) a most unequivocal success, which his Lorillard and Jerome victories of the same year only served to emphasize.



Ethelbert.

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memory of Salvator as a race-horse that his stud career should have proved comparatively disappointing, coming as he does directly from Levy, whose line is as notable for its lack of success in the production of champion sires as for its potency in producing champion winners.

The Realization of 1891 developed another genuine American hero in Potomac

Mr. Richard Croker's Dobbins (imp. Mr. Pickwick—Thora) won a decisive victory for the "Yale blue, gold tassel" in the Realization of 1894. This dashing chestnut colt had experienced a very severe two-year-old campaign, but nevertheless reappeared for his three-year-old battles in superb shape, possessing as he did an indomitable will and an iron constitution. Mr. Croker's present turf activities being mainly confined to English scenes, Dobbins is now located at the head of his owner's stud at Wantage, and is already the sire of English winners despite the moderate chance afforded him.

It was not until 1896 that Potomac's earlier "double-event" feat was duplicated by the Realization victory of Requital (imp.)

Eothen—Retribution), whose Futurity of 1895 was won in the service of Mr. David Gideon's "dark blue." Requital carried the "green, red sleeves and cap" of the late Col. W. P. Thompson in the Realization, however; and what could have



"Skeets" Martin.



Dobbins.

been more appropriate than that he should have scored this second great achievement under the banner of the purchaser of the Brookdale Farm, where he first saw the light of day? Requital was a bay colt of superb quality, and those who should know him best have always maintained his right to be classed among the best horses of the American turf. As a matter of fact, the son of Eothen

showed such high form in his earliest private work that he was never really tried, and his comparatively unsatisfactory career as a four-year-old was probably due to the remarkable but significant fact that he was then "buckshinned" for the first time in his life.

The Messrs. A. H. & D. H. Morris's imported colt The Friar (Friar's Balsam—Lizzie Baker) won the Realization of



"Tod" Sloan.

1897, for the "all scarlet" like a thoroughly good horse, although the fact that he was a difficult colt to "place" in a race—being upset if put under the slightest restraint in the early or middle stages of the running—militated against him in the majori-

ty of his public appearances. The Friar went on and won the long-distance Brighton Cup in the same year, however, a "double" which was again accomplished in 1898 by Mr. Marcus Daly's Hamburg (Hanover—Lady Reel) in that gentleman's newer "copper, silver sleeves, green cap." Hamburg, who thus earned for Mr. Daly the proud honor of being the only owner to win a second Realization, was not only a superb individual but was also one of the fastest pieces of horseflesh ever seen in America. His action made him simply the poetry of motion when extended, a peculiar tendency of the hind feet to overlap the fore feet at the beginning of each stride making his motion much on the greyhound order.

Hon. Perry Belmont's Ethelbert (imp. Eothen—imp. Maori) completes our list of Realization heroes, and his impressive success under the "maroon, scarlet hoops" in 1899—when the race first became known as the Lawrence Realization—proved him to be no unworthy addition to the roll. Indeed, at the time of writing, Mr. Belmont's sturdy four-year-old is at the very front of American thoroughbreds, having won the Metropolitan Handicap of 1900 in a style which not only emphasized his splendid class but also substantiated the previous claim of his party that he is a really better horse than his average record of 1898 and 1899 would indicate.

Having entered upon this brief consideration of the Realization's history with the purpose of emphasizing those of its winners who may seem, in my opinion, worthy of being included in a championship or semi-championship rating among their contemporaries, it seems hardly necessary to offer the obvious explanation as to the absence of especial com-

ment upon the remainder of Realization victors, for Tournament, Daily America and Bright Phœbus, the respective winners in 1890, 1893 and 1895, hardly appear to measure up to the required standard, albeit the success of the first-named of the trio was certainly achieved by the most ample margin in the history of the event.

As has been said, the Coney Island Jockey Club's leading three-year-old fixture appears the most likely of all our classics to eventually become the Derby event of America; and its projectors and maintainers may well congratulate themselves upon their official success in having given and retained for our turf an event whose comparatively short history of scarcely more than a decade has witnessed the triumphs of such genuine American heroes as were Salvator, Potomac, Tammany, Dobbins, Requitel, The Friar, Hamburg and Ethelbert on the days when they scored their respective victories in the Lawrence Realization.

STROKES AND OARSMANSHIP AT AMERICAN UNIVERSITIES.

By Chase Mellen.

ALL strokes consist of certain common parts. The "full reach" is that in which the oarsman is in position to begin the stroke; the "stroke" itself is the part during which the oar blade is in the water; the "recover" is the period during which the body, slide and oar are moving forward to the full-reach position. These parts are in practice closely and smoothly run together. In addition are others subordinate, but quite as important, which may be grouped roughly under the heading "details."

In every system of rowing it is necessary for the oarsmen to row in "time" and "together," that is, there must be simultaneousness and uniformity of action. It must be taken for granted that all the strokes I shall refer to must have these two essential features, so that no farther mention will be made of them.

With so much by way of preface, I must ask permission to set forth the char-

acteristics of what will hereinafter be called the standard stroke. I do not wish to be understood as insisting upon this as the ideal or perfect, or as the standard American or English stroke. Whatever my individual opinion may be as to its merits, my purpose in describing it as the "standard" is to provide something with which to compare the strokes I am attempting to explain. It will serve as a basis of comparison.

The following, then, are the principal characteristics of this standard, or means of comparison:

1. *The "full reach":*

Bodies well forward, arms straight, the reach forward as long as possible without unsquaring the shoulders or bending the back, the slide well up to the stops, heels pressed firmly against the stretcher. The oar is held lightly, not grasped tightly, and the blade rests just on the surface of the water. The position

at the full reach as easy and natural as possible consistent with getting the longest possible reach forward while avoiding over-reaching, or straining.

2. The "stroke":

At the word the oar blades are dropped *square* into the water and just covered; the power is applied instantly and maintained firmly, without variation, to the end of the stroke, or until just after the arms bend and the oar is brought into the chest, when it is slightly relaxed (the feet, nevertheless, being still firmly pressed against the stretcher) and the handle of the oar is allowed to come into the chest, principally of its own momentum, the hands and arms being used chiefly to keep the blade from turning or wobbling, and to bring the handle well onto the chest and to drop it down smartly, thus bringing the blade out clean and square, the hands then being shot out until the arms are straight.

3. The "recover":

With the arms straight and the shoulders square, the body begins to and does move forward, slowly and at uniform speed, the torso swinging forward from the hips as if on a pivotal pin driven through them transversely. The back is held firmly, whether straight or curved does not matter particularly so long as it is held in the same position throughout. When the body gets to the full reach, the blade is dropped once more square into the water and a new stroke is begun. The swing forward is independent of the slide and is a real forward *swinging* movement of the body itself.

"Details":

At the full reach, the body is forced down between the knees (which are well opened), not lying down, but as far as can be without prejudice to the maintenance of entire control over it. This would be at an angle of about thirty degrees from the perpendicular. The shoulders must be comfortably but firmly held square over, or at right angles to, the keel; the back and shoulders must assume the position they are to maintain throughout. As the power is applied and the stroke begins, the body is brought up to the perpendicular, the slide being held almost until then, when both go back almost together, the body a little faster and to an angle of about thirty degrees, never further, from the perpendicular. The

shoulders thus swing through an arc of about sixty degrees.

The power comes from the simultaneous application of the strength of legs and back, the arms being used simply as connecting rods between the sources of power and the oar handle. They do no real pulling work. The man who pulls with his arms tires quickly. The elbows are kept close in at the sides of the body at the end of the stroke.

The heels are to be kept firmly pressed against the stretcher throughout, the greatest pressure being applied when the blade enters, and being evenly maintained until it leaves the water. The effort must be to *push* the stretcher through the bottom of the boat, thus insuring a lift with the body that will bring the powerful muscles of back and shoulders into co-operation with those of the legs. The oarsman should not be permitted to pull his body up by the toe straps and the slide forward on the recover, although he may use them slightly, at first, for that purpose. He should be compelled, however, to *swing* the body forward independently.

The hands, or oar handle, are brought well "home" until the thumbs touch the chest, being then dropped smartly down, before the blade is turned in the slightest, and shot quickly out until the arms are straight. Only then does the recover with the body begin. As the hands shoot out, after being dropped, the blade is feathered. The blade comes off the feather gradually as the swing forward proceeds, being again squared just before the swing is finished.

The sliding seat is used as an aid to the body swing, to lengthen it out and increase the power of the leg drive, but not to take the place of either. The stroke should be taught on a fixed seat, and when its principles are so firmly learned that rowing in accordance with them becomes second nature, then only should the slide be introduced. The latter should begin with and follow the body swing forward, being kept under control all the time, ending while the body is finishing the recover from a little in front of a perpendicular position to the full reach, and being held until the body almost reaches the perpendicular again on the drive back.

The various parts of this stroke must

be so smoothly run into and dove-tailed with one another as to make it impossible for any but an expert oarsman to tell just where one begins and the other ends. Jerky movements of all kinds must be avoided. Smoothness of action is indispensable. Furthermore, each movement must be made with snap and there must be no sluggishness.

Perhaps we are now in a position to inquire into the characteristics of the strokes in use at the universities referred to.

The Yale stroke in 1897 and until this year resembled the standard. Prior to that time its most marked features were a broken recover, a short body swing and the subordination of body work to the slide. By "broken," I mean the body slide and hands began the recover simultaneously and rapidly, the body and slide gradually slowing up as the full reach was approached. I am informed that the stroke of 1900 marks a departure from that of 1899 in that the swing is very much shortened. At the full reach the body measures an angle from the perpendicular of only fifteen degrees, and about the same at the end of the stroke. Much greater stress is laid upon the use of the slide than on the swing as a means of lengthening out the stroke.

These other minor differences ought also to be mentioned: The shoulder and slide reach the end of the stroke at the same instant, the arms being bent soon enough to allow the application of the full power to the very end. The hands are not rowed "home," but are stopped just before reaching the chest. The shoulders and slide begin the recover as soon as the hands (which are shot out quickly) are clear of the knees. A certain amount of discretion is allowed the individual oarsman as to relaxation of rigidity of the back on the recover, the last part of which is made with the slide, which creeps up to the stops, the body reaching its final full-reach position before the end of the recover. The slide is not held at the beginning of the stroke, but moves back with, though more slowly than, the body.

My criticism of this stroke is that the swing is entirely too short and that, therefore, the weight and strength of the back are not taken full advantage of. If length of reach and finish are obtained chiefly by means of the slide and arms, an undue

waste of muscular power must result. A real swing is, in my judgment, one of the most essential attributes of good, effective oarsmanship. I believe that Yale has made a mistake, which she will regret, in shortening the body swing and emphasizing the use of the slide. It seems to me that subordinating body work to the slide necessitates a greater use of the arms, which is wrong.

Harvard's strokes of previous years were numerous and nondescript—sometimes like Yale's, sometimes like Cornell's, sometimes *sui generis*, but never, from one season to another, quite the same. The water was never caught as hard as in the Yale stroke. The confusion of defeat bore hardly on Harvard's boating interests until, in 1897, Mr. Rudolph C. Lehmann, the well-known English coach, came to implant the right principles of rowing. Since that year Harvard crews have been rowing substantially the standard stroke, and there is no present indication of any departure therefrom. It is being learned more thoroughly each year. Possibly the bodies do not go as far back as in my standard, the full reach may not be quite so long, and the power may not be relaxed toward the end of the stroke; but apart from these and other comparatively unimportant differences, Harvard is using the standard stroke.

Cornell's stroke since 1897 has been the standard with only slight differences as to minor details. In 1896 it was undergoing a transformation. Prior to that year it was much shorter, both as to length of body swing and stroke in the water. In fact, there was no body swing. The bodies did not go beyond the perpendicular, and the slide was the principal feature of the inboard work. The watermanship, that is, the art of handling the oar *per se* and of sitting the boat, was always of a high order.

Columbia, under the long régime of Dr. Peet, has varied her style of rowing quite as often as Harvard did prior to 1897. One striking perennial feature, however, has been the broken recover invented by Mr. Cook about 1890. To avoid checking the boat's headway is apparently considered the matter of highest importance, and the coach's efforts seem to be principally directed to that end. The water is not always—I mean from

year to year—caught hard, but sometimes it is. The stroke can best be described by calling it an imitation of the Cook stroke of 1892 with certain supposed improvements. It is not nearly so powerful or finished, however. In 1899 it was very short and the men did not reach out well.

Pennsylvania's stroke is rather a scoop than a hard, sustained catch. The power is applied, apparently, after the blade enters the water and just before it reaches a right angle to the outrigger. Then the blade is tugged through, principally with the arms, and the body goes back scarcely beyond a perpendicular position. There is no real body swing. Of course, these features render Ellis Ward's stroke very different from the standard. In 1899 it was surprisingly successful against the latter as rowed by Wisconsin and Cornell.

The Wisconsin crew of 1899 rowed almost precisely what I have called the standard stroke. Its body swing was far and away the best of any crew of that year. I am told that the crew is being coached the same stroke this year.

From this review we find that the coaches of Harvard, Wisconsin and Cornell are practically agreed as to the right way of rowing. Such differences as will appear among their crews this year will be of execution rather than of principle. For it is a truism to say that no two coaches, however much they may be of one mind, can teach different crews to row precisely in the same way. They may even vary, from year to year, parts of the stroke, and nevertheless be striving to reach and teach the same "stroke" essentially.

Then again there is legitimate diversity of opinion as to length of slide, method of seating the men, length of oar, width of blade, and so on. Harvard, Yale and Cornell in 1899 used a slide of about 17 inches; Wisconsin and Pennsylvania used one much longer, the former one of about 22 inches. Some coaches prefer a slide on an inclined plane, while others stick to a flat one. Oar blades vary from $5\frac{3}{4}$ to $7\frac{1}{2}$ inches in width, the advocates of the narrower believing that just as much execution is to be done with it as with the wider, but with less unnecessary effort. That is, they believe the wide blade entails an undue amount of work without compensatory

advantage, causing waste of effort. Oars vary from 12 to 12 feet 4 inches in length. In English crews the oarsmen sit not directly behind each other, but the stroke-side oars on one and the bow-side on the other side of the keel. In American crews, almost universally, the men sit directly in line and over the keel. These matters, as to which there is legitimate diversity of opinion, are not essentials, nor does the fact that coaches differ as to them imply that they do not believe in the same stroke.

I am inclined to believe that the weakness of all of the strokes which differ radically from what I have described as the standard, lies in their departure from certain fundamental principles which, in my judgment, are essential to good oarsmanship. Parenthetically let me say that if I have used the personal pronoun frequently I must be forgiven for so doing on the ground that there is not yet entire unanimity of opinion as to the right way of rowing, and therefore a man is entitled to express his opinion thereon.

The first of these fundamental principles is a hard catch, the power to be sustained throughout the stroke.

Another is a long reach forward whereby the blade catches the water well back of the outrigger, and a long swing keeps it in the water until well in front of the outrigger, thus insuring a long stroke and increasing the area of leverage. A real body swing, in the manner described, brings into play the weight and strength of the body. If it is subordinated to the slide, the advantage of this weight is lost, or greatly minimized.

One other and most important fundamental of good oarsmanship is a slow, even recover—I do not mean sluggish, but one in marked contrast, as to speed, to the drive back on the stroke. The object of the recover is not merely to get the blade into position for a new stroke, but as well to give the oarsman a chance to recover, as far as he may, his strength and wind from the preceding, and to brace himself for, the coming stroke. An even recover as nearly fulfils this object as possible, and at the same time, when properly executed, prevents the slightest checking to the way of the boat. It is better than all the broken recoveries that ever were invented or dreamed of.

While there may have been many strokes in the past, everything points to the adoption of one style of rowing in the near future. Coaches may still disagree on certain points, but the fundamental ideas of the right stroke are being rapidly agreed upon. I believe that as the idiosyncrasies of theoretical coaches are abandoned, something very like the standard stroke I have described will be adopted. No one who has followed rowing at all closely can deny that there is a tendency toward assimilation of styles.

All oarsmen believe that there is only one right way of rowing, and they are gradually but surely reaching an agree-

ment in regard to that way. Indeed, so far has this agreement materialized, that I venture the assertion that Pennsylvania and Columbia are the only colleges of those mentioned which still use strokes differing radically from each other and from what I have described as the standard. The Yale stroke of this year is certainly a modification of last year's, when it was the same as Harvard's, but even so it is not so radically different as to constitute an entirely distinct style. I am, moreover, confident that Yale has not permanently left the fold of the colleges at which the standard of oarsmanship is highest.

SINGLE-HAND CRUISING AND SINGLE-HAND CRAFT.

CRUISING TYPES FOR ALL WATERS.

By W. P. Stephens.

OPINIONS may differ as to the relative merits and value to the sport of large and small yachts, each class having its ardent supporters; but few will deny the utility and necessity of the mosquito fleet as specially fitted to the needs of many who are debarred from yachting on a large scale, and as the best training school for the young Corinthian who will some day graduate into the ownership of a yacht whose tonnage at least sounds imposing.

The day of the small racing yacht began just about ten years ago with the establishment of the "half-rating" class on the Solent, in England, in addition to the one-rating and the two and one-half rating, then very popular in that locality. The new class was a success from the start, and its doings almost rivaled in importance the performances of the big cutters, the same noted designers being called on for both.

After being firmly established in England, the half-rater class was transplanted to this country through the challenge of the late J. Arthur Brand, of the Minima Yacht Club, to the Seawanhaka-Corinthian Yacht Club for an international race. The coming of Mr. Brand with his half-rater, *Spruce III.*, the building and testing of a defending fleet, and the final cup matches off Oyster Bay, in which the challenger was defeated

by the American champion, *Ethelwynn*, were only second, in that busy and exciting season, to the matches between *Valkyrie III.* and *Defender* for the *America's Cup*.

As the result of these races, and in particular of the success of the American boat, the fifteen-foot R. L. class, the American equivalent of the British half-rating class, was established on a basis which then seemed both satisfactory and permanent, the little yachts having much besides their speed to recommend them.

It is not necessary, even if space permitted, to trace in detail the subsequent history of the class and the cup; the former may be summed up by the statement that the fifteen-foot class is no longer in existence, and the twenty-foot class, which has succeeded it, is composed of a type of racing machine which no one with the best interests of yachting at heart can contemplate with any sentiments but disgust and disappointment.

While there are degrees of badness in the various sub-types composing the class to-day, the majority are calculated to work nothing but harm to yachting, both racing and cruising. These sub-types, which have honestly earned among others such derisive appellations as "toboggans," "barn-doors," "skows," "skates," "Mary-Ellens" and "divided skirts," are in the main shoal oblong boxes of great width

and an almost rectangular deck outline, with at best a small cockpit, if not completely decked over, and sailed with one edge immersed and the other high in the air, the crew hanging on as best they can.

The speed of these machines is to a great extent fictitious, depending on the failure of the clubs to remedy the plain defects of the letter of the rules and on the ingenuity of the designers in avading both letter and spirit.

Costly in the extreme (a machine of this kind running up as high as \$1,500), outbuilt after the first season if they have not already fallen apart through extreme light construction, and useless except for the special matches for which they are constructed, the modern twenty-footers not only do injury to racing, but through the largely fictitious standard of speed which they have established they make the yacht of wholesome type appear much slower than she would really be by any just system of measurement.

In themselves they attract, when new, very few recruits to the racing ranks; their use teaches little save a sort of aquatic acrobatics that is but a small part of the true art of sailorizing, and in the premature old age of a second or third season they are probably left to rot on the beach, instead of doing good service for yachting as cruisers or honorable ex-raters.

As long as such freaks are recognized and actively encouraged by the clubs, no general good to yachting can be looked for from racing in the small classes.

When it is conducted within reasonable limits and in craft of a good type, there is much to be said for racing as a school for the novice in yachting; but, after all, it is a question whether there is not quite as much to be learned in the

other branch of single-hand sailing and cruising. At the present time, when the smaller racing classes are barred to many through the expense of such sport, a view of the cruising side of small yachting may be both interesting and of real value.

The term "single-hand" as applied to men and boats covers a wide range. Some of the boldest single-hand cruisers are men who have braved the broad Atlantic in a skiff or a dory, impelled by no higher aim than a berth in a dime-museum or a salary from some soapmaker whose name adorns the sail; in fact, it is even a question whether the brave mariner who in a similar manner exploits the merits of certain makes of pills and nostrums off Coney Island beach in summer could not

establish a valid claim to membership in the honorable fraternity.

Excluding these professionals, the limits of single-hand sailing are still broad and elastic. They begin with river cruising in a light and small canoe, a pursuit that was advanced to a definite and permanent position by the

cruises of the late John MacGregor in 1865-6 in the first Rob Roy canoes. Where they end, it is hardly possible to say after the gigantic exploit of Captain Joshua Slocum in circumnavigating the globe, alone and unassisted, in the yawl *Spray*.

For all practical purposes the sport may be considered under three heads: First, inland and river cruising in open or half-decked canoes and boats with tent shelter; second, coast and lake cruising in small-decked yachts, and, third, cruising on the open sea in yachts of from five to twenty tons.

The first has a permanent following and a literature of its own under the title of canoeing. Apart from its intrinsic



Canoe-Yawl "Cherub."

From a painting by Mr. Albert Strange, Humber Yawl-Club book.

charms, as set forth so eloquently by the late Robert Louis Stevenson in his "Inland Voyage," it has the great advantage of requiring little time, little money and little water. With a canoe costing \$25.00, and a like sum for full outfit, one may profitably utilize the half-holidays and the summer vacation in any region where streams of a foot depth are to be found.

Sea cruising on an extensive scale, even short of a three-years' cruise, such as that of the *Spray*, is possible only when a man has unlimited time and few ties to bind him to the land, together with some amount of money.

The second division, intermediate between these two, offers a form of sport that is not only most fascinating in itself, but is well within the reach of the majority of young yachtsmen. The craft may cost anywhere from \$500 to \$1,000 if new and specially built; the work includes short week-end cruises in home waters throughout a full half of the year and a fortnight or a month of summer vacation on Long Island Sound, the St. Lawrence River, Chesapeake Bay, the Dutch canals, the Norfolk Broads, the Great Lakes or about the Solent.

A correct dictionary definition of the term "single-hand" may be difficult to frame, but it is not necessary to waste time over it; the same end may be attained by a brief statement of the two requirements of a single-hand yacht. First, she must be capable of being easily handled under all conditions by one man; second, she must have suitable accommodation for two, or even three. The first condition being complied with, the full liberty of the owner is assured; he is free to start at all times, and the absence of a chosen friend at the last moment does not compel him, on the one hand, to abandon his cruise; or, on the other, to put up with uncongenial society for the sake of necessary assistance in handling the yacht. The second condition makes it possible to accommodate a congenial companion whenever such can be found.

The sport of single-hand sailing depends on the proposition that the man must be abnormally constituted who cannot, on the one hand, stand his own society for a time and find positive enjoyment in solitary cruising; and who, on the other hand, after a certain amount of such work, cannot find a new pleasure in

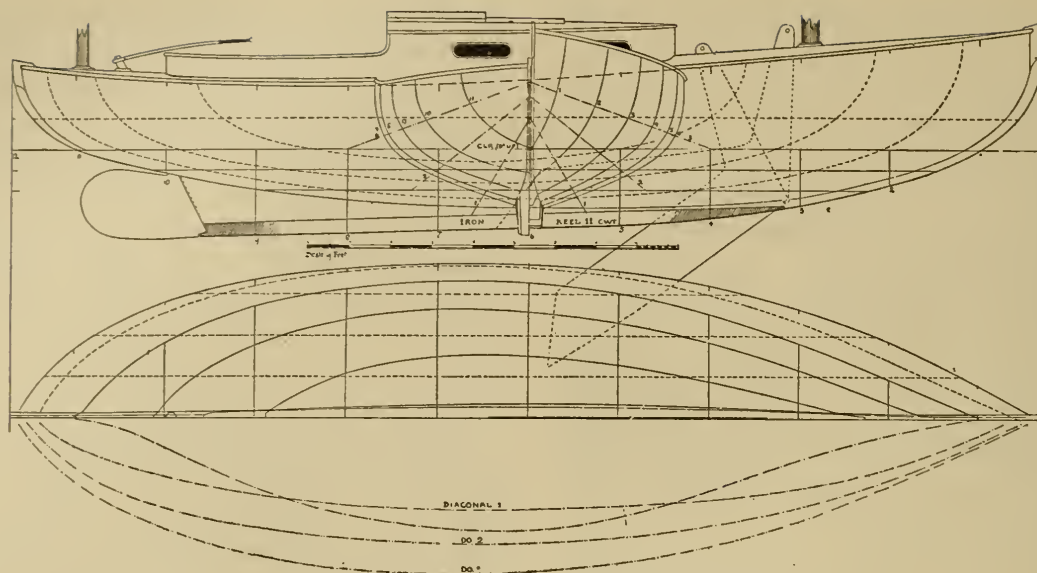
the society of the right sort of shipmate. The true single-hand craft is fitted for both cases; through the excellence of her design and the perfection of her fittings the double labor of sailing and house-keeping is light, even for one man; and yet her dimensions and interior arrangements are such as to give comfortable quarters for two or three, all told. Above all, the size and arrangement must be such as to make the owner at all times independent of professional aid.

Even for the limited work now under discussion, the size and type of boat may vary within very broad bounds; but there are certain requisites which cannot be dispensed with. The ideal single-hander must be: 1, Small enough for one. 2, Large enough for two (or three). 3, Seaworthy, in design, construction and fittings. 4, Non-capsizable and non-sinkable. 5, Comfortable, with a dry, snug house. To obtain each and all of these essentials in full, with a number of secondary but important details, is a difficult matter; and, as in all yacht designing, a judicious compromise is necessary.

That the yacht must be small enough to be efficiently handled by one man, is beyond argument; that she may be in all respects a single-hander without having accommodation for two, or even one extra hand, is literally true; but the great majority even of those who prefer solitude at times and always abhor a large crowd on a small boat are neither misanthropes nor cranks who would bar all companionship.

The necessity for seaworthiness in the broadest sense is plainly obvious. The great charm of such cruising is the ability to go anywhere within reason, and to do this one must be as nearly independent of weather and water as skill can make him. Even in the smaller craft intended strictly for coast work, there will be times when a worse sea is met, in proportion, than in a larger vessel offshore. The design must be strictly of a seagoing type; there must be no catboat hull to capsize and no long spoon bows to crush in a sea. And the construction must match; no flimsy ex-racer to twist her keel out or to split her decks.

The fourth point may admit of a slight compromise, at least on the second count. In anything of the keel type, absolute non-capsizability may be had, and even



Humber Canoe-Yacht—Centerboard Type.

"Otter," designed by Mr. Albert Strange. From Humber Yawl-Club book.

in the deep center-board type, such as the Humber canoe-yachts, there is no danger of a capsize even if such a thing should be actually possible.

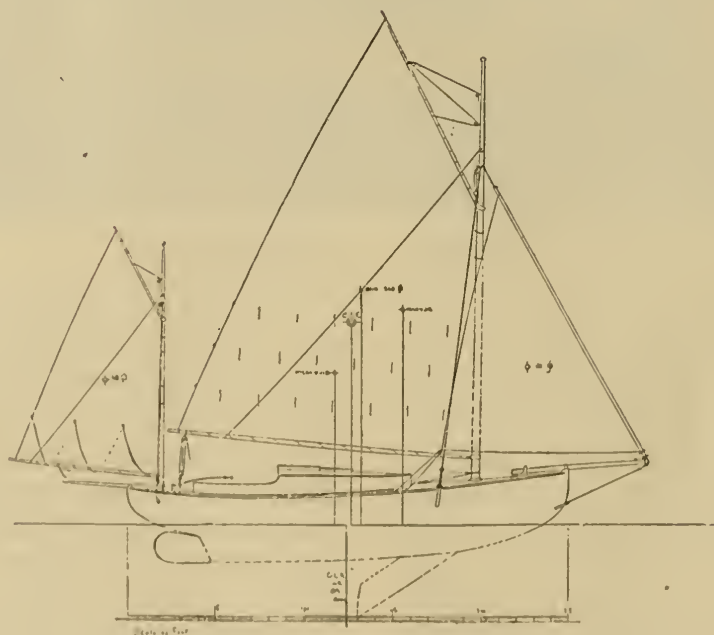
Non-sinkability is a valuable quality in any yacht, but it is not always easily obtained in a small craft. There is no material difficulty in the subdivision of the hull into an ample number of compartments to float it under almost any conditions short of utter destruction; but this can be done only at the expense of much valuable space. Another objection is that the compartments are difficult to ventilate.

The serious holing of a small yacht is of very rare occurrence, so rare that with a thoroughly good construction, with planking of adequate thickness, and a good pump, all bulkheads and tanks may be dispensed with, provided the boat is non-capsizable. As far as ordinary collision from without is concerned, the weight of tanks and bulkheads can well be put into an increased thickness of planking or the use of a stronger and con-

sequently heavier wood below and about the water-line. The convenience and cleanliness of a hull open from apron to sternpost, with all parts fully ventilated, go far to offset the remote possibility of a serious hole below water.

The comfort of the crew is a matter of importance in a small yacht; at the best there will be times when there is no escape from the all-pervading wet, when it

is only a question of degree of dampness between indoors and out, and when there is nothing for it but to make the best of things and hope for a change of weather. To reduce this element of discomfort to a minimum, a cabin is necessary, entirely enclosed and tightly built both as to sides and roof, where one may read,



"Otter," Sail Plan.

cook and sleep in comparative dryness and comfort in any but the worst weather.

It is no uncommon thing for fishermen to live for days at a time in winter at sea in half-open boats with merely a shelter under the fore deck, and a great deal of Corinthian cruising has been done in

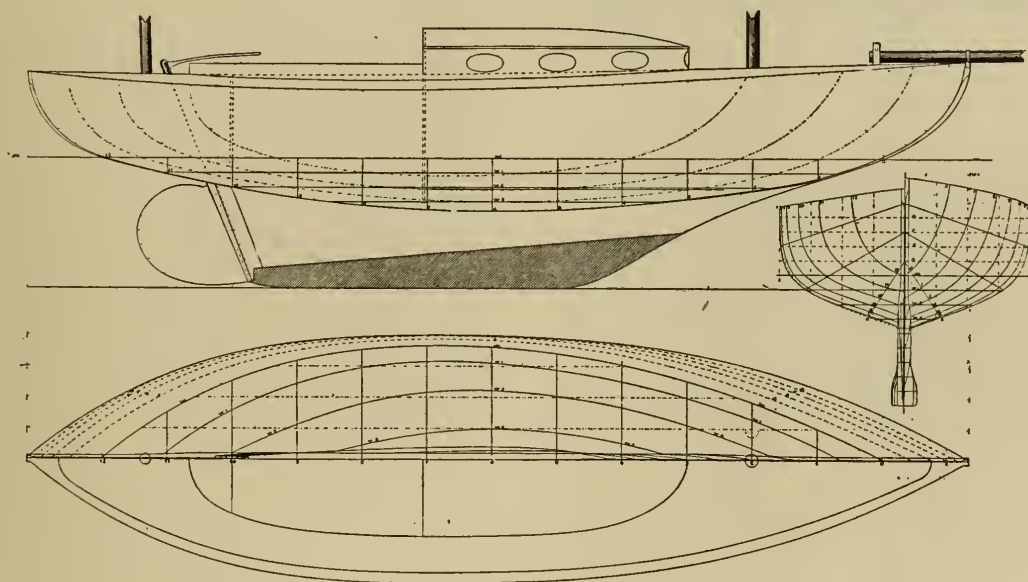
such craft. In canoeing no permanent shelter is possible, and in many canoe-yawls, even of the larger sizes, a tent is used as the sole shelter, or possibly the well is partly roofed in by movable wooden hatches.

While the half-decked boat with its tent or hatches has advantages for certain work, if the size of the hull admits it, the closed cabin is much better suited to the wants of the average single-hand navigator who, held close to the land by business and only sailing at intervals, lacks the hardihood of the professional fisherman, or even the exceptional amateur whose time is spent wholly afloat.

The cabin should be one of the special charms of the single-hand yacht, so planned as to give a dry and safe place

still an open question; with a properly designed craft the water-line may run to at least forty feet, and the main limitations seem to be the weight of anchor which one man can weigh and cat with ordinary tackle, and the size of mainsail which he can set and reef. For most men, however, a water-line of eighteen to twenty-one feet is most suitable, as giving all reasonable accommodation with a minimum of draft and cost.

As to type of boat, a great variety of models have been used at times—fishing smacks, canoe-yawls, miniature cutters and converted lifeboats and ship's long-boats. For that seagoing work which is expected of even the smaller single-handers, the canoe type, as distinguished from the sloop type, is in every way



Humber Canoe-Yacht—Keel Type.
From Humber Yawl-Club book.

for everything that belongs to it in its manifold capacity of kitchen, drawing-room, library, chart-room and sleeping-room. The man who follows canoeing—and a charming sport it is—must be content to live in a water-tight bag, so far as his belongings are concerned, with a tin box or so to help out; but when he advances to the command of a single-hand yacht he should have, as he well may, a cabin with its two berths, lockers, shelves, racks, etc., for every article of his greatly enlarged *ménage*. If he be something of a mechanic as well as a sailor, the planning and fitting up of such a cabin will prove one of the great charms of his craft.

How large a yacht can be safely and easily handled by a competent man is

superior. The former, whose distinctive characteristics are the moderate proportions of breadth and depth to length, the fair and easy form, and the similarity of the two ends, both pointed, is strictly a natural type, as old as the art of sailing itself. To it belong the savage war canoes of all quarters of the world—the old Viking ships, the ancient galleys of the Mediterranean, and the surf-boat, seine-boat and whale-boat of civilized nations. The model was taken by the early navigators from nature itself, the dried leaf floating on the water, and the graceful pods of plants, suggesting its artistic curves of bow and stern and sheer, all drawn boldly and freely to fit the waves, with no regard for the cramping tonnage laws of ignorant yachting politicians.

The sloop type, on the contrary, is purely artificial, its characteristics of great breadth, limited depth, full round bows and square stern being derived directly, as the result of tonnage laws, from the oblong boxes first used on the Tyne to float the greatest number of tons of coal on the smallest possible measurement, and then developed into something that could be sailed after a fashion by the fishermen and smugglers of the shoal Dutch coast. Where vessels, large and small, are built to meet only natural conditions in all parts of the world, the canoe type is followed; it is only when tonnage dues and faulty navigation laws are the first consideration that men are forced to build boxes, wide and shoal in the sloop, or narrow and deep in the tramp steamer, but, nevertheless, boxes rather than boats.

Small as they were, the early canoes of the *Nautilus* type, designed by Mr. Warrington Baden-Powell, of the Royal Canoe Club, about 1870, were excellent sea boats; and as the canoeists of that day extended their cruises on more open waters it came about very naturally that the general model was retained, while the dimensions were increased. About 1877 a variety of large canoe, about seventeen feet long, nearly five feet breadth and twenty inches depth, was produced on the Mersey, the name "canoe-yawl" being given to it. In this craft it was possible to cruise in comparative safety and comfort on such open waters as the small canoes were unfitted for, and the sport of single-hand sailing assumed a definite position as a friendly rival to its older sister, canoeing.

Since that time the canoe-yawl has developed into a very practical and sensible sort of small yacht, and has become the favorite craft for all kinds of single-hand work. While the first boats were merely big canoes, of limited draft and power, and relying on the tent for shelter, by the addition of a metal keel and a permanent



"Christopher Columbus."

cabin a much more seaworthy and comfortable craft has been evolved. The later and larger boats have so far outgrown the original canoe-yawls that a few years ago a new term was coined by the writer, the original designation of canoe-yawl being retained for the smaller centerboard boats without fixed ballast, while the term "canoe-yacht" was pro-

posed for the larger and abler craft with deep fixed keels and cabins; this nomenclature was generally adopted.

Like steam yachting, single-hand cruising is a sport that is in its nature independent of rules and club-houses; though in all probability a member of some yacht or canoe club, the single-hand sailor depends on his ship alone, and asks little of the club. There is, however, one club exclusively devoted to single-hand cruising. This rather unique organization, the Humber Yawl Club, of Hull, England, has a membership of about seventy, mostly located in Hull, or in neighboring ports on the North Sea; and its fleet, of about sixty small craft, is mainly made up of canoe-yawls and canoe-yachts of from fifteen to twenty feet water-line. One of the institutions of the club is the annual cruising of the fleet, sometimes in squadron and sometimes in small parties, the boats being shipped by steamer from Hull to some port on the other side of the North Sea, from which opens an extensive cruising ground of Dutch and German canals, rivers and meres.

Another institution is the annual book, in which is recorded in print and picture the work of the club, photographs and sketches of places visited, information for other cruisers and designs of the club boats. A number of the club members are sufficiently clever amateurs to be able to design their own craft, build and sail them, and then to portray on paper the pleasures of cruising.

The club has given to the sport a special type of canoe-yacht, the work of

some of its members, which is admirably fitted for single-hand work in waters where draft is limited. This type, represented by *Eel*, *Cherub* and *Tavie*, is about eighteen to nineteen feet on the water line, six feet breadth and but two feet draft, including a lead or iron keel of half a ton weight. An iron centerplate of peculiar form works through the keel and yet takes up little space in the cabin, which is quite roomy enough for two or three on a long cruise. The sail plan, yawl-rigged with roller jib, is small enough for sea cruising. These little ships find their way each summer about the coast of the North Sea, the English Channel and the inland waters of England and Holland, their owners living a nomadic existence, which is near to being the very perfection of yachting.

If space permitted, it would be pleasant to review the cruise of John MacGregor, who, through his writings, was the first to call general attention to single-hand cruising; the experiences of Mr. McMullen in forty years of cruising, ended at last by his quiet and peaceful death at the tiller of the *Perseus* in the English Channel, the ship sailing herself alone for a day after; the interesting cruises in "Small Yachts and Large Canoes," made by the Rev. H. Fiennes Speed in the little *Water Rat* and *Viper*, and later, accompanied by Mrs. Speed, an expert yachswoman, in the four-ton *Lerna*; the Baltic cruise of Mr. Knight in *Falcon II.*, and the offshore cruises of Captain Isaac L. Church in his *Christopher Columbus*. As this would make far too long a yarn, the leading dimensions and details of some of the more noted single-hand craft are given in condensed form in the following table, and also a list of the principal books published on the subject.

Not that any of my readers will have occasion to consult foreign authors for suitable waters on which to go a-cruising single-hand, for where Rob Roy and the pioneers of the pastime had one mile of suitable waters at their convenient service, Americans have hundreds. What are the Zuyder Zee, the Scheldt, and the Maas, compared with the great inland seas, inlets, estuaries and rivers which lie at the very wharf-end of every sailor, from topmost Maine and farther Canada, down to the Carolinas!



Idle Moments in Friesland.

The difficulty in the United States is not to find suitable cruising grounds, but to make up one's mind what to select out of the rich abundance.

Take alone the wealth of waters which the Metropolitan sailor has at his immediate command—it is bewildering. There is the whole Sound, with its inlets and inland bays on the one side, and the two great harbors of the Bay spreading out, east and west, and each direction inviting him to still further estuaries and tidal rivers, of which latter there are four, besides the lordly Hudson. A cruiser can take his choice of the Hackensack or the Passaic, the Raritan or the Shrewsbury rivers, and on each find abundant pleasure, not to mention the glorious waters of the palisaded Hudson and its imprisoned back-waters—the Tappan Zee and Haverstraw.

But these are only the beginning of the cruiser's possibilities. Down the coast of New Jersey are sand-bank-protected inland waters. The Delaware and its bay are within a narrow strip of a canal of Chesapeake Bay and the Susquehanna. The Potomac opens where that bay ceases, and all the tidal waters of Virginia and Maryland, one of the richest and least-known sections, await the adventurous, to say nothing of the riches of Albermarle Sound and Pamlico, which lie immediately below.

The Great Lakes provide exhaustless cruising, even if one goes no farther north than Georgian Bay, or to the better-known Lake Ontario, through the Thousand Islands and down the St. Lawrence, and home by the Richelieu and Lakes Champlain and George, completing the circuit by joining the Hudson again (through

the canal), and back by that delightful river.
These are but samples of the hundreds of miles of shores and water-ways which invite the single-hand boat owner to years and years of cruising, and leave him, still fresh, fields and waters new in superabundance.

NOTED SINGLE-HAND CRUISERS.—DIMENSIONS AND DETAILS.

	Yacht.	Owner.	Designer.	Type.	Rig.	Tonnage.	L. O. A.	L. W. L.	Breadth.	Draft.	Ballast.
1850	Leo	R. T. McMullen	J. Thompson	Keel Cutter	cutter	3	20 ft	18 ft	6 ft. 3 in.	4	1 ton
1857	Sirius	" " "	" " "	" "	"	11	32	29	9 8	6	7½
1865	Orion	" " "	G. Inman	" "	"	16½	42	38	10 5	7	12
1867	Procyon	" " "	Messrs. Holloway	c. b. "	lugger	6½	21 6		7 9	3 2	2
1890	Perseus	" " "	" " "	Keel "	yawl	5	27 2		7 4	4 6	3¼
1867	Rob Roy	John MacGregor	J. S. White	" "	"	4	23	21	7 7	3 6	1
1869	Kate	Lt. E. E. Middleton	" " "	" "	"	4	23	21	7 7	3 9	1
1876	Silver Cloud	Rev. Wm. Forwell	A. Burn	" smack	"		20	19	7 9		
1879	Water Rat	H. Fiennes Speed	J. MacWhirter	" canoe-yawl	"		16	16	4 1½	1 4	¼
1881	Viper	" " "	H. Fiennes Speed	" yacht	"	2¼	20	20	5 5	3 2	1
	Lerna	" " "	" " "	" cutter	cutter	4	25		6 9	4	
1882	Vital Spark	" " "	S. Bond	" canoe-yacht	yawl	2	18	18	5 2	2 8	½
	Undine I	Frank Cowper	" " "	" cutter	cutter	6½	28	23	8 6	4 6	
	Lady Harvey	" " "	" " "	" "	yawl	29	44	13	4 13	6	
1897	Undine II	" " "	Frank Cowper	" "	ketch	18	44	35	10 7	6	
1889	Cherub	Albert Strange	Albert Strange	c. b. canoe-yacht	yawl		20 3	17 9	5 10	1 10	
1897	Induna	Linton Hope	Linton Hope	Keel "	schr.	3	26 6	18	5 6	2 6	¾
1897	Ecl	Geo. F. Holmes	Geo. F. Holmes	c. b. "	"	3	21	19	7 2	2	1
1892	C. Columbus	Capt. J. L. Church	Higgins & Gifford	K seine boat	schr.	18	40		9	4	
1895	Sprav	Capt. Joshua Slocum	" " "	K smack	yawl	13	36 9		14 2	4	



BOOKS ON SINGLE-HAND CRUISING.

Down Channel, R. T. McMullen. The Voyage Alone in the Yawl Rob Roy, John MacGregor. Cruises in Small Yachts and Large Canoes, H. F. Speed. The Cruise of the Kate, Lieut. E. E. Middleton. A Thousand Miles' Cruise in the Silver Cloud, Rev. Wm. Forwell. The Falcon in the Baltic, E. F. Knight. Sailing Tours, Vols. I, II, III, IV, Frank Cowper. Sailing Alone Around the World, Capt. Joshua Slocum.

A NEW GOLF ALPHABET.

By Carrie Foote Weeks.



A stands for Aptitude, Accurate Aim,
Which will make an Adept at this popular game.

B is a Bunker; it takes Brawn and Brain
To land your golf Ball on the fair green again.

C is the Caddie who carries your Clubs;
He calls you a "Corker," in spite of your "flubs."

D is the Driver you use at the tee;
The dirt which you Dig, and that other "big D——"

E is the Energy ever displayed
When Engaged in a round with a pretty young maid.

F is a Foursome, a Foozle, and "Fore"—
If your Form in the first F is bad, you're a bore.

G stands for Grip; the professional's Grasp;
And the Green which you reach, if you conquer this clasp.

H is the Hole, not as deep as a well;
And sometimes it's Heaven, and oftener H— ?

I can be Iron, or mashie, or cleek,
You know best yourself which Iron you seek.

J is a Jerk. If your ball finds a cup,
To play with a Jerk often sweeps it right up.

K is to "Keep your eye on the ball;"
If we follow this rule, there is hope for us all.

L stands for Links, and for "Like as we Lie,"
Which is different from "Lie as we Like," by-the-bye.

M stands for Medal play, also for Match,
At both you are beaten if you play at scratch.

N is a Niblick, respected by all;
For it is a good friend in Need, to a ball.

O stands for Oxygen, Ozone, and Odds,
Which golfers accept as gifts of the Gods.

P is "to Press;" "Don't" makes a good rule,
One can Play pretty well, and yet Putt like a fool.

Q is the Question beginners must ask:
"Is my club the right length?" "What's wrong with my grasp?"

R stands for Reply made by old golfers keen:
"A good stance; have patience. Watch me Reach the green."

S is the Swing that we practice in dreams.
A Stymie looks simple. 'Tis not what it seems.

T is to Top. Sometimes sign of Terror;
If hazards or bunkers win balls by this error.

U means Unpopular people who play,
Who borrow your clubs, and stand in your way.

V is the Virtue of one Scotch high-ball,
To lengthen your golf yarns, and drives, in the Fall.

W is a Wrist shot, Whippy and free;
Those who do it well, good golfers must be.

X might stand now for "great eXpectations,"
Day dreams of golfers, in all ranks and stations.

Y is Yesterday; a word hardly known.
It's this Year, and new heroes sit on the throne.

Z stands for Zenith. The golfer whose fame
Touches this point can die, saying, "I've played the game."



SALMON ANGLING

A FEW REMARKS ON.

By Dean Sage.

SALMON angling has ever been ranked among the most exciting and learned of piscatorial arts; but the fish is such a singular compound of wisdom and fatuity, that while at times he will succumb as readily to the most arrant blockhead as to a Henderson or a Francis, on other occasions he will turn up his nose and flip his tail in derision at the most cautious wiles of these masters of the rod.

There is very little uniformity about the salmon, and this want of settled and decided character has doubtless led to the formulation of the vast quantity of rules as to times, places, flies to use and other minutiae, which are, as a whole, better calculated to embarrass than to assist the beginner. Each man who has anything to say on the subject is likely, and properly, too, to give the results of his own successful experiments, which may have been in quite a different direction from those of some other writer who has done equally well.

I know men, or rather one man, who has been for years a successful angler, and who acts on the principle that salmon care nothing for the color of the fly they take, but only for the size. Some confine their fishing to small flies without regard to the state of the water; others to large ones. It is certain that on a well-stocked Canadian salmon river, an angler who persists in any system of flies, however ridiculous it may seem, will have enough success to justify his attempts.

I have taken salmon with a bunch of muskrat fur tied to a hook. The fish were rising then to a mallard wing, gray-bodied fly, and this fur was the same color, though the size of the lure was twice that of the fly. I have seen a salmon which refused everything he ought to have taken, rush to his death at the sight of a small, red ibis trout-fly.

Probably, however, the man who uses good-sized, dark-colored flies at the beginning of the season, and reduces the size gradually as the water grows low and clear, will attain the best result. A change in high water from a large dark fly to a small brilliant one is often suc-

cessful. Nevertheless, many use large brilliant flies in high water with good success. A salmon fresh from the sea, with his appetite still about him, is very likely to dash at anything that passes over him, and a large object attracts his attention further off than a small one.

It is well to remember that all flies do not appear the same in the water as out of it. This can be easily observed by putting them in a glass of water and looking at them through the sides or bottom. The Jock Scott, which probably is the favorite Canadian fly, though brilliant when dry, is quite the reverse when in the water. The general effect of all mixed-winged flies when in the water is dull, unless there is such a predominance of some one strong hue as to overpower the others, the golden pheasant and jungle cock feathers being, perhaps, those which have the most decided effect in water.

So far as their being visible for a long distance is concerned, dark flies are better than light-colored ones; the fairy can be seen farther than the silver doctor, and the blue and brown farther than the white miller.

It is well, when fishing where salmon are known to be, first to try such flies as are generally considered the standard ones for the time and place, and if those fail, to try something decidedly different in size or color, or in both.

It is a fact that, on those rivers with which I am familiar, a whole generation of salmon will sometimes change its views about certain flies, neglecting almost entirely a kind which had long been very popular, or taking up another which before would not be looked at.

A claret-bodied fly with a turkey wing and blue hackle, which from ten to fifteen years ago was irresistible on the Restigouche, has, since then, become hardly worth using; and, on the other hand, for two years back, the white miller and coachman have been excellent taking flies where previously, at least on the parts of it with which I am most familiar, they had been utterly unsuccessful.

These and numerous other vagaries on the part of salmon give many chances for the angler to ascribe to his own skill results which come from the purest chance or guess work, and many there are who fondly fancy that so small a thing as the introduction of one minute feather in a fly will cause a salmon to take or leave it. It is unreasonable to suppose that anything more than the general effect is considered, or that even moderate differences in size influence the fish, except when they are lazy and the water is low and clear.

Now, we will suppose that an angler has so far deceived a salmon as to induce him to rise to a fly but go down without taking it; what is he to do? The answer depends to some extent on the way in which the fish rose; whether with an eager rush that seemed to fail through undue haste; languidly, just making a lump on top of the water without breaking, or in a sportive manner, indicative only of a desire to amuse himself at the expense of the unlucky floating insect.

To go back a step, however, let me say that many a salmon is lost by taking the fly away from him too quickly. If a fish makes a good rise and misses, through accident or design, the chances are more than even that he will turn around to look for the fly, and if it is near the same place may take it. I have seen a salmon swim about on top of the water for several seconds in search of a fly that had been snatched from him, and it is very common to see one follow for some distance a fly being drawn away. Therefore, a cardinal rule in salmon fishing is to let the fly alone for an instant after a rise that has been missed. Some good anglers make one cast at the same spot directly after such a rise; but I think leaving the fly alone is better.

Should a fish rise eagerly and miss, I should, after resting him three or four minutes, give him another try with the same fly, beginning just over, or a very little above where I suppose him to be. There are certain places on streams where the position of salmon can be exactly located—generally back of some particular rock, which may be the only spot thereabouts fish lie in at all. Frequently, however, there may be other adjacent holes that salmon will remain

in temporarily, and a fish which has risen may for a short time change his quarters and be several yards distant when cast over again; or in some swift-flowing, gravelly-bottomed stretches which are favorite haunts of salmon, they lie scattered over the bed of the stream anywhere, often changing their positions.

The point, I think, when casting over a salmon after the first rise, is to have his first sight at the fly near enough for him to rise to it again if so inclined. Therefore, after casting ineffectually where the fish is supposed to be, try above and below where he first rose. Sometimes—especially in the smoothly flowing pools—salmon which have risen and followed the fly will stop much nearer the angler than the point from which they rose, and may not again be cast over, at all. If the fish on this second trial either refuses to rise or comes again without taking, I should recommend a longer rest, and then trying him with a fly materially different in size and color from that which first tempted him. Should that prove ineffective, a couple more changes may be made, and, as a last resort, the fly first risen to, tried.

In case of the first rise being a faint one, I should make a decided change in the fly before trying the second time. If the rise was to a medium-sized fly, I should follow it with a small one of different color, and next a big one of the first-used variety.

After this all rules fail, and the fastidious fish may not rise again at all, or may be fairly bullied into doing so by keeping at him.

I have known a salmon to rise nine times at each occasion of a fly passing over him, and the last time take it; and again, some of the best rises are never repeated. Fish that have risen and been pricked, however slightly, will very seldom come a second time. Once I took a salmon that had been on my fly ten minutes before and ran out quite a bit of line before breaking away—the proof being in the wound on the fleshy part of his jaw where the hook had torn out.

The common way of fishing the larger of the Canadian rivers is from a canoe, though some of them are happily adapted to that much more delightful mode of



James L. Weston

THE LAST HALF HOUR OF THE NORTHERN TWILIGHT IS THE BEST BIT OF THE DAY.

angling from the bank or by wading. In either method, the manner of presenting the fly is about the same; that is, the cast to begin with is short, the fly being thrown out at right angles with the course of the stream and allowed to float downward with an irregular motion until it reaches the line of the current in front of the caster. The working of the fly causes its wings and hackles to expand and contract, and gives it a lifelike appearance supposed to increase its attractiveness, though fish will often take when it is floating down-stream as if dead.

The fly is generally taken by salmon when under water, but not always. In the Nepissequit and some other of the smaller rivers, and, indeed, occasionally on the larger ones, salmon will rise to the fly worked on the surface, and, to hook them, have to be struck as quickly as trout.

A particular spot where a salmon is known to be, should be cast over carefully several times, and the fly changed to some other the fish are taking, before giving him up.

After the cast has been lengthened out to the extent of the capacity of the angler or of the water to be fished, and every foot gone over, the canoe, which has been anchored, can be dropped down the pool and the process again begun.

When the fly is taken by a salmon, and the angler has no trouble in recognizing this fruition of all his previous anxieties and labors, the main object is to get him ashore just as soon as possible, and the period of time occupied in doing this is one of which the chief interest and enjoyment come after its termination.

I doubt if any angler with a good fish on would welcome, or, indeed, come far from cursing, any phenomenon which tended to defer the moment of gaffing. As soon as the fish is gaffed, his views change in the twinkling of an eye. The fights of long duration with salmon are periods of great and not at all delightful anxiety to most men, and the consciousness of enjoyment comes later.

The chances of a well-hooked salmon's escape are greater in the second fifteen minutes' play than in the first. Weak points in the tackle are found which may yield to the continued strain; the hold of the hook wears and grows

looser, or the salmon, by being humored, gets around some sharp rock where the line may be cut, or works his way to a current too strong for the weakened tackle.

Therefore he should be played hard from the beginning and his wishes opposed on principle, for they are rarely in accord with the designs of the angler. A very short experience will show how hard it is to play the fish with regard to the safety of the rod and line, and that point should be approached very closely all through the battle. If a few moments of its practice result in the fish breaking loose, quick consolation comes in the thought that by trying a different course, though you might have kept him a little longer, you never could have landed him, as lightly-hooked ones are sure to escape anyway.

In playing a salmon, always, if possible, keep below him. By doing so you get the powerful aid of the current in your contest. If you are above him the current assists the fish, as whatever else he may do, his general tendency is to go up-stream, and even a hook in his jaw can't overcome this impulse. By keeping below, the bagging or "drowning" of the line is avoided.

Every additional yard of line a fish gains increases his chances of getting away; therefore, all symptoms of yielding on his part should be taken advantage of to get nearer to him. When he jumps, lower the point of the rod that there may be no taut line for him to bring his weight against.

If he sulks behind some stone and there lies motionless, or gives quick, short, angry jerks, tap the rod smartly with your knife handle, which will often set him going; or, if that fails, throw a judicious stone or two at him, being careful not to hit your line.

One of the most provoking things a salmon can do when hooked is to turn and run towards the angler. This generally happens, if at all, when the fish is down and across the stream from the fisherman. If you are ashore and can do so, the best thing is to go backward as quickly as possible, reeling up at the same time, keeping, however, a good lookout behind to see where you are going, that you may not, as I once did, fall into the root of an upturned tree,

which held me entangled till the fish escaped. Such action on the part of the salmon is always sure to give him a lot of slack line, and this should be recovered with the greatest possible quickness. It almost always happens when the angler is above the fish, and is another strong reason for keeping below him as much of the time as you are able.

Salmon are not infrequently hooked foul, under the chin, under one of the pectoral fins, or in the muscles near the root of the tail, probably also in other parts of their bodies where the tissues are not strong enough to hold the hook. I have landed two or three hooked by the tail, and found that though their first rushes were unusually strong, they tired very soon by reason of the strain put on their chief means of motion. When hooked under the chin or by one of the fins, they can keep their mouths closed and make most gallant fights. A good many of the monsters every angler loses undoubtedly owe their enormous supposed size to such accidents.

There is the greatest difference in the fighting qualities of salmon even in the same river, and, as with men, those of medium size and well proportioned average the strongest and most enduring.

Many salmon are lost for want of a good gaffer; the poor one either breaks the line, misses his aim altogether three or four times, or wounds the fish so as to renew his force for just long enough to enable him to escape.

A gaffer should always go below his fish far enough not to be seen, and stand perfectly motionless with his gaff extended in front until the angler gradually works the salmon towards him. If the fish sees him and tries to move away, he should remain quiet until the fish ceases to notice him, then come out of the water and go down below the salmon again, never trying to move towards him or chase him. When at last the fish comes within reach, the gaffer should gently put the gaff over and beyond him, strike him in the shoulder, if that is possible, but never strike until certain of his aim.

Salmon may be landed without gaff or net in two ways. Firstly, by playing them until they are thoroughly exhausted, and then putting the hand

very gently under their sides until it reaches the root of the tail, which affords a grasp, and pulling them quickly out of the water; or secondly, when there is a shelving beach, getting the salmon headed towards it, then running quickly back and hauling the fish ashore. The stones and the belly of the salmon are both so slippery that much less force is required than would be supposed—as you have the acquiescence of the fish until he finds himself on land.

I have often seen one of the hardy settlers of the Restigouche, Alford by name, go out alone in a log canoe to fish the pool in front of his land. When a salmon was hooked, Alford lifted his anchor, and worked the canoe ashore as soon as possible, a manœuvre requiring, with the conducting of a lively salmon at the same time, the nicest management. Once ashore, he played his fish until it was exhausted, and then ran it ashore on the beach.

I have seen him take in this way a fish of 26 pounds, a small fraction of the dead weight of which would have broken his casting line, and in 1888 a monster of 45 pounds.

The time of day for salmon fishing—or rather the best time—is, fortunately, not that popularly supposed to be it: the early morning.

Certainly, all through the first part of the season in this country, a man may rise at a reasonable hour, take a leisurely breakfast, and get out to his pool by eight o'clock, with the knowledge that he will probably have better fishing than if he had been roused at four and hastened to the mist-shrouded water, chilled and comfortless, and feeling that, luck or no luck, he was bound to persevere at his task for three or four hours.

The man who fishes from eight to eleven will have more success than he who fishes from five to eight, and much more rational enjoyment. Sometimes the fish rise better toward noon.

The evening, from five o'clock until dark, is also a propitious as well as a pleasant time for angling, the last half hour of the northern twilight being the best bit of the day—indeed, salmon will sometimes take the fly after dark, and, I dare say, would do so more were they oftener tried.

IN THE JUNGLES OF THE GHAUTS.

CURIOUS NATIVE HUNTING METHODS.

By Herbert Hudson.

IN their relative position to the rest of the continent and to the adjacent ocean, the Western Ghauts of India suggest a comparison with the mountain chains of the western border of North America, but there the comparison ends.

Those Ghauts are a range of mountains in the province of Mysore, running down the west coast between Bombay and Calicut, which must not for a moment be confounded with Calcutta on the other side of the country. In height they range from 2,000 to 6,000 feet, and they act as a buffer to the storms which come in from the Indian Ocean. But while screening the inland provinces from the violence of the monsoon, they rob them of the sea breezes which would otherwise greatly alleviate the deadly heat of the plains.

For nine months in the year the climate on the Ghauts is as pleasant as one could desire. It is certainly hot, but the thermometer rarely exceeds 85 degrees in the shade, and there is always a cooling breeze. The three months of the monsoon are less pleasant, for the rainfall averages 100 to 200 inches.

This district is one of the most productive fields for coffee-growing in India, yet it is sparsely populated by European planters, and the native tribes who live in the villages lead much the same sort of existence as their ancestors, the aborigines, must have led, cultivating modest paddy fields, and hunting wild animals in the yet undisturbed jungle.

The hill country of Mysore can boast of some of the grandest forest scenery in the world. Range rises beyond range, each densely clothed with magnificent trees of every variety and shade; delightful, park-like woodlands stretch into the table-land, varied at intervals by swards of verdant pasture. Swift-flowing rivers wind through the valleys, and waterfalls, in some places 800 feet high, dash themselves over the cliffs.

Ancient gold workings have been discovered in these regions from time to time, many of which have been re-opened with successful results; and one might be excused contemplating the possibility that Mysore was one of the places which supplied the ships of Tarshish in the days

of King Solomon, for, with the exception of Ceylon, it is the only country in which one finds side by side "gold and silver and ivory and apes and peacocks."

The Ghaut tribes are essentially of a hunting disposition. From the earliest times they have been accustomed to seek their dinners among the well-stocked jungles which clothe the hills and valleys of their country.

Like most hunters, the Ghauts prefer firearms when they can get them, but they are not particular as to what kind of a gun they have, so long as it will project a slug twenty yards or so.

Very fearful and wonderful are some of their weapons, ancient-looking matchlocks dating back to the dark ages, held together with pieces of grass or string, and, once charged, they cannot be unloaded except by being fired off. Their owners carry them about with an appearance of apprehension, as if never certain that they will not explode unexpectedly.

Those who cannot obtain a gun, arm themselves with a bow and arrows, with which they are very proficient marksmen. The bow is made of well-seasoned bamboo, with the string formed of a strip of the same wood; the arrows are most formidable-looking shafts, furnished with steel points as sharp as a knife. A group of these native hunters resting during the heat of the day furnishes a picture which any artist might desire to paint. The long-bow men, leaning in picturesque attitudes against the trees, the beaters with their quarter-staffs and wood-cutters' knives stuck in their belts, and the beautiful forest scenery, carry one's mind back to the legends of Robin Hood and his merry men in the green glades of Sherwood.

The patience of the native is proverbial; he will crouch in a tree for hours on the chance of shooting a jungle fowl, and this is his favorite mode of procedure when in search of small game; but when after sambur or jungle sheep he generally organizes a drive.

A likely bit of cover having been fixed on, the shooters are ranged around it in horseshoe form, while a party of from ten to twenty beaters walk through in

line, shouting and yelling to drive out the quarry.

There are few things more exciting than a beat in the jungle. Though one may have to wait drive after drive without seeing anything, yet one can never be certain that something will not come out, even at the last moment; for though animals as a rule start off at the slightest sound, deer will very often lie very close, and come out immediately in front of the beaters. Then, again, we never know what is going to come out; it may be a barking deer or it may be a tiger.

When the first sound is heard of an animal knocking against the hollow bamboos, one is raised to a great pitch of expectancy; the noise comes in waves which echo and reverberate through the forest. Every now and then it ceases, as the animal stops to listen; then it recommences, gradually coming nearer and nearer, yet its direction is very difficult to locate, and one requires a practiced ear to judge where the animal will come out.

I doubt whether the native hunter derives much enjoyment from the actual sport itself; his main object is to obtain flesh for the stockpot, and he cannot understand how a white man cares to take the trouble of tramping through the jungle simply for the sake of the animal's horns or hide; he could turn the skin to far better use as parchment for covering a tom-tom.

In addition to this method of killing game, the Indian hill-man resorts to all manner of devices to capture his quarry, a favorite way being to dig circular pits 8 to 10 feet deep in which long, sharp stakes are placed. When intimation is received that deer or bison (wild cattle) are near, a grand beat is organized; the animals are hemmed in on all sides but one, and the most demoniac yells and shouting, in addition to the hideous din of tom-toms, awaken the echoes of the forests and drive the terrified animals towards the fatal pits. Sometimes the wonderful instinct of the beasts warns them of the danger, but more often, so skilfully is the trap laid, one or more of a herd fall victims, and after a terrible struggle to escape from the pits are cut up and disposed of.

The most curious method, however, of slaughtering deer is that which is prac-

ticed by the tribes on the Masnagudi side of the Mysore plateau.

The deer is a ruminating animal, and chews the cud, as even the most ignorant hill-man knows, and this knowledge has furnished him with a method which he uses against the deer tribe with great effect.

Patient observation discovers a favorite deer haunt, where the animals after grazing their fill lie down and chew the cud at ease. This spot is carefully surrounded by a considerable number of men, each provided with a tiny tom-tom. The object is not to frighten the herd to any great degree, as that would probably end in their breaking through the cordon and escaping. So by a gentle tapping of the drum and an occasional gleam of a torch, they keep the hemmed-in animals in a state of alarm, sufficiently prolonged to prevent the frightened creatures chewing the cud.

The consequence is that after a few hours the herbage consumed by the deer remains undigested, their stomachs swell, and they are prevented from running as fast as they originally could. When the men see that the deer are in this state they let slip their pariah dogs, and arming themselves with bows and arrows, knives, clubs, and whatever comes handy, go for the well-nigh helpless deer and invariably make a good bag. The amount of patience, exposure to the damp, chill air of night and general hardship this mode of killing entails is considerable, and only an Indian hill-man is capable of carrying it out. Of all methods of pursuing deer it certainly is the most original I know.

It seems somewhat incongruous to speak of autumn in March, yet this month is veritably the fall of the year as regards the jungle.

The trees are all bare and brown, dried up and scorched by the blazing sun. The bamboo clumps—like bundles of Chinamen's fishing rods—disconsolately bob and sway, and the fallen leaves lie six inches deep, forming a yellow carpet which crackles to the slightest footfall.

There is hardly a breath of air, and the noises which strike the ear are intensified by the surrounding silence. Hark to that crow of defiance—there struts a lordly jungle cock! He knows he is safe till the rain comes; no one could get within

shot of him on this tell-tale ground. Over yonder, a gaudy woodpecker is springing his rattle on the bole of a feathery acacia, to which the castanet bird replies like an echo.

There goes a flock of green parrots, flashing through the air in a streak of emerald; and presently, with a creaking of branches, and much screaming and scolding, a troop of monkeys come into view, leaping from tree to tree with their well-known agility. Another pause, and then a choir of grasshoppers takes up its plaint, the shrill cry rising and swelling in rasping waves of sound, and gradually dying away again.

As darkness draws on, strange cries come from the depths of the jungle. Anon one hears the curious barking call of the jungle sheep, or the screech of some baneful night bird; and the hollow bamboo clump as we pass it gives forth an uncanny sound, as though some unhappy spirit was imprisoned within its recesses. What wonder that the superstitious coolie, bringing up the mail bag from the post, should prefer to go three miles round by the road rather than take the short cut through the jungle, where "bootahs" and banshees hover round the path, and the souls of wicked men prowl about in the forms of wild beasts.

As the rose opens to the shower, as the ring-dove replies to its mate, so does the jungle answer to the rains. And now I am speaking, not of the heavy downpour of the monsoon, but of the April-like showers which precede it, and which the planter calls the blossoming showers, for they come just at the time when the coffee is in blossom, and preserve the flower from being scorched by the sun before the berry has set.

Every tree is bursting with buds, every bamboo is clothed with delicate greenery.

The ground, but a few weeks ago a hard, leaf-strewn surface, is now mantled ankle-deep in ferns, maidenhairs and mosses; here a yellow, crocus-like flower, there a many-colored orchid, otherwise all is green.

I am not very well versed in botany, but I should think that a great many of our garden trees and plants must have been transplanted from this part of the world. That one over there is unmistakably a laburnum yellow with clustering blossoms. Here is a fragrant white jas-

mine, and near it a bush covered with little white berries which we used to call snowballs. Half hidden in the grass is a wax-like stephanotis, and innumerable convolvuli wind their tortuous trailers along the ground.

Gaudy-winged butterflies as large as a man's hand float lazily from flower to flower, or with the independence of a bird sail up far into the blue sky. One magnificent yellow and black species has down on its under wing almost as thick as feathers; another would seem to have stolen its coloring from the turquoise; but the emperor of them all is the Ganesa Swallow-tail, who bears on his velvety emerald wings panels of a metallic hue which in one light appear to be peacock blue and in another the richest purple.

And now, with restored nature, returns the time of the hunting, and the gun of the sportsman is heard again in the woods. With cautious air and crouching gait the shikari passes noiselessly over the soft ground, following the footprints of his quarry with the assistance of one faithful "smell-dog;" keen eyesight is necessary, and sharp ears, for keener eyes are watching, and sharper ears are on the alert for the approach of danger. Many of the big game animals of India bear similar names to those of America, but it is in name only that the denizens of the American forests resemble the wild animals of India. The prairie bison is very different from his Hindoo cousin, who stands fifteen hands high and has a short-haired coat almost as black as the boulders of his native jungles.

The anchorite monk of the desert is represented by a mountain recluse who grubs for his breakfast on the hillsides, and dwells among the wild date palms, rarely, if ever, descending to the lower levels.

Here, too, above all, "circles and sails aloft on pinions majestic the vulture;" lending that finishing touch which the eye requires to enable it to gauge the broad, blue expanse stretching between height and height. Watching his graceful and apparently effortless soaring, we forget for a moment his unpleasant proclivities, and—like the master poet—compare him to

"The implacable soul of a chieftain slaughtered in battle,

By invisible stairs ascending and scaling the heavens."

UNCLE JOHN'S BEAR.

By Henry Wallace Phillips.

UNCLE JOHN PORTER was shoveling tailings out of a sluice-box with a many-tined tailing fork, and he seemed to be not very well satisfied with something.

He swore vigorously when a stone became wedged in the fork-tines and had to be removed with a kick; not that it was so much trouble to kick a stone loose, but it gave a tangible matter to grumble at.

A hale old gentleman was Uncle John—not a gray hair in his head, despite his sixty odd years, and no chill had fallen upon the warmth of his peppery temper.

Tall, lean and yellow, with a long, solemn face, on which grew the hooked nose of the Yankee, flanked on either side by narrow, sharp gray eyes, and arching over thin lips covering big teeth, he was not beautiful; but the easy swing with which he heaved his fork testified that his usefulness was unimpaired.

Uncle John had been bred a farmer, and would still have been a farmer, even if fate had forced him to make his living by piracy.

Fifteen years he had followed the placer—high-bar and low-bar, dry-gulch and “scoop” for it, ground-sluice or pan, just as it happened; and yet not a line of his face, a curve of his body, or a twist of his mind had been altered from the days he followed the plough.

Which, of course, made him a singular figure among the good-natured, happy-go-lucky inhabitants of Quaking-Asp Creek. One of the amusements of this widely scattered community was to go up to the bend at night and get a rise out of Uncle John.

The old gentleman was a “free-trade-Methodist-prohibition-Republican,” and violent in every branch. The other boys espoused such principles as would bring the most fun.

What would have been an odd thing, if it were not that such incongruities are common, was the fact that Uncle John had picked out Jim Ferris—Keno Jim—the most utterly irresponsible, shiftless, lazy, sunny-natured, no-good cuss that ever was known in the mountains—for his “pardner.”

And that is what was troubling the old man this morning.

“Gad durn him!” grumbled he. “Goin’ out huntin’! You bet! When ther’s work to do, Jim goes huntin’. Been gone two hours now, an’ here be I, sweatin’ and pullin’ an’ haulin’, an’ I can’t get more’n ten dollars a day out o’ this patch, single-handed, to save my buttons—damn the hull business!”

A shuffling step behind him caught Uncle John’s ear. He disdained to look around.

“So you be back, be ye? Reckon yo’ll want your grub now, arter workin’ so hard!” he said, with biting sarcasm.

No answer.

“What’s the matter with ye? Why don’t you say suthin’ when you’re spoke to?”

There was a snort, which sounded like suppressed laughter. The sound snapped the old man’s patience at a stroke.

“Laugh, heh? Well, now, I’ll give you suthin’ to laugh fur!” he yelled, and catching up a broken shovel-handle he whirled around.

And then he stopped, petrified. The shovel-handle dropped from his fingers, and his eyes stuck out like marbles; for there, not thirty feet away, stood an enormous grizzly, swaying to and fro, the big head rolling from side to side as the animal regarded the man, with a sort of Falstaffian humor in his little eyes.

“Gor amighty!” whispered Uncle John as he took a step back; “Jehosophat!” he added as he tripped and sat down in the sluice-box, and the water spurted nearly over his head.

And so he sat, like a statue in a fountain, for a full quarter of a minute, staring at the apparition in front of him, while the bear tilted his head far to one side and returned the gaze, with an air of coquettish roguishness absurd beyond the reach of words.

The power of thought and the power of motion returned to the old man together. He was half-way up the hill to the cabin before his enemy realized that he had started.

Once inside the safe confines, the old gentleman barricaded the door with everything available and sat panting on the edge of his bunk to recover his wind and his wits.

The first thing that occurred to him was that he must warn Jim, who was likely to return at any minute; so he clambered up the ladder to the cock-loft and thrust his head out of the window, from whence he commanded a good view of the surrounding country.

This cock-loft was due to Uncle John entirely. When they were building their cabin Jim protested that it was of no use, anyhow, but the old man evaded that part of the argument, and laid great stress on the fact that he had always lived in houses with two floors; that he always intended to live in houses with two floors; that all decent people lived in houses with two floors, and that he would see many profane and unpleasant things happen to himself and every one around before he'd live in a house that hadn't two floors; and as Jim never held out long against anybody, the house had two floors.

The old man looked around him. In front sat the grizzly, still with his head cocked to one side like a dog expecting a biscuit; there was no malice in his face—merely expectancy, but Uncle John shook his fist at him and reviled him earnestly. When he had exhausted his power of vituperation, he raised his voice in a warning cry of "Oh! Jim!" uttered at short intervals and gradually losing all expression as the time wore on and the performance became monotonous.

At length, "Hi, there!" came from the canyon wall opposite. Uncle John cast his eyes up to Jim's much-astonished face. The bear was hidden from Jim's view by a clump of quaking asp; and why his pardner, the sedate, sarcastic and unemotional Uncle John, should elect to go up in the cock-loft and yell "Oh, Jim!" like a poll-parrot, was a complete mystery to his mind.

"What in Halifax is bitin' ye?" shouted Jim, outraged and indignant.

"Bear!" bellowed Uncle John.

"The Sheol you say! Where?"

"Go 'round, go 'round! Behind them brush. You can see him!" vociferated Uncle John, gesticulating excitedly.

"Holy Sufferin'! Well, I should say bear!" exclaimed Jim when he had reached the point of vantage from whence he could see it. "What's next, Uncle?"

"Shoot him! Durn his dratted picter! Shoot him!"

"Oh, no! Uncle! That wouldn't be

sportsmanlike. I never shoot my game sittin'," answered Jim easily.

"What!" screamed the old man, taking this persiflage in earnest. "You talk like that, an' me a-sittin' 'up here like a licked rooster? You shoot that bear now, right off, and don't give me no more such stuff! You hear *me*!"

"Now, Uncle John, there's a great many things I'd do for you," returned Jim, "but when it comes to puttin' one ounce of bird-shot into a ton of grizzly, there's where friendship ceases; I've got to draw the line somewhere. He ain't a bad sort of bear just now; but if I was to blow a charge of shot in his hide, chances are he'd raise Billy-be-damned, and then some. You ain't seen a bear real excited, and I have; it's astonishin' the way they carry on."

"Well, then," commanded the old man, "go down the crik and borrow a rifle from the boys."

"Nope; that cock won't fight, neither. There's only one rifle on the crik and the baron's out huntin' with that—he won't be back for three days most probably; an' I don't think there's any one around here wants to try their luck with six-shooters—not on that bear of your'n, anyhow. You picked out a dandy while you was at it, Uncle. He makes all the others I ever see look like forty cents on the dollar. Uncommon fine bear, that!"

During the interview the bear turned his head from the one to the other as each called in turn as if he perfectly understood what was being said. He made no move, except to scratch himself with a forepaw occasionally.

"Well, what *am* I goin' to do?" Uncle John's voice was near to tears of vexation.

"Damfino," answered Jim. "Got to wait till the bear moves on, most likely. I'd like to put in the time at some kind of amusement, for I'm holler to my backbone. We're too far away to play cards handy. What do you say to a game of twenty questions?"

"What's that?" shrieked Uncle John. The cry was a reproach, but Jim chose to receive it as an inquiry.

"Why, you take something—" he replied.

"I'd like to take you an' that bear an' bam your fool heads together," shouted the infuriated old man.

"Take it easy, Uncle. Take it easy," admonished Jim. "The only thing that comes of gettin' hot is perspiration—now have you got it?"

Disdainful silence from the cabin.

"Is it animal, veg'table or mineral?" he continued.

Uncle John leaned far out of the window. "Jim Ferris," he said, "if I had a gun here, an' it only had one load in it, an' if my life was a-hangin' on the balance, I be damned if I know which I'd shoot at fust, you or that bear!"

Jim's laugh rang loud through the thin air, and the bear seemed to feel insulted, for dropping to all fours, with a growl, he turned to the side of the house; whence a tearing and splitting sound soon showed that he was at work.

"What's he doin'?" yelled Uncle John.

"He's breakin' in the window," answered Jim, and there was no fun in his tone this time. He had not thought of the animal actually being able to get into the cabin.

Jim stood a second irresolute, as well he might—a man armed with a shotgun and a knife is a pretty poor match for a full-grown grizzly. Then with a curse at himself for what he called cowardice, he began to drop down the cliff-side with the sure agility of a cat. "Cuss me, if I'm goin' to let the old man git hurt an' never raise a hand," he said to himself.

"Jim! You go back! Don't you come down here 't all!" yelled Uncle John, imperious even in his terror. "Go back, I say! D'ye hear me?—go back, durn ye! go back. What's the sense o' your gittin' killed, too?"

At that second a thought struck Jim. "Uncle John. The giant powder that Ole left—ain't it up there?"

"Yep!" answered the other, with a ring of hope in his voice.

"There's a piece of fuse a'ready capped—put it in a stick—take some more and tie 'em to a piece of bacon, 'n' chuck it out—blow him to Hades an' gone!"

"How many shall I take?"

"Oh, dad-gast it! A handful—anything—hurry up! Oh, durn it! hurry up!"

The old man vanished, to reappear in a surprisingly short time, considering the usual deliberation of his movements, with his infernal machine in his hand, the fuse hissing and spitting small sparks.

"Chuck it out beyond the corner, so's he can see it!" yelled Jim.

The bacon landed with a thump that attracted the attention of the bear; he shuffled over and sniffed at it, while Jim and Uncle John looked on with the most intense anxiety. If he refused to take the bait, the only hope left was that the noise might drive him away.

The fuse gave a sudden spurt and the bear started back, giving a half-turn as if to leave, and the hearts of the onlookers sank accordingly.

But Bruin thought better of it; he made a catty dab at the meat with his paw, and then held it down carefully, as if he thought there were life in it. No harm resulting from this, he cautiously advanced his head, and slipped his tongue over the tasty surface.

This removed all doubts; he hooked his claws under the meat, raised it sideways and grabbed it in his teeth—when there came a most tremendous explosion.

Most of the bear shot up and over to the southwest, landing on the rocks high up; while the greater part of the cabin, including the roof, soared in the opposite direction, clearly visible through the thick cloud of dust and smoke.

Jim sat down hard in astonishment. "Jeehovally Bob!" he said; "he must 'a' used the hull box! A clean sweep!—bear, cabin, pardner and all!"

This last thought brought him to his feet, and the hot tears to his eyes as well.

He realized in that instant how lonesome things would seem with the crochety, cross-grained, but thoroughly kind-hearted old man gone forever; and his vision was blurred as he dropped rather than climbed down the remainder of the cliff, cursing himself bitterly for the part he had unwittingly played in the catastrophe.

Once at the bottom, he tore across to the scene of the upheaval. Ruin and desolation were disclosed as the languid breeze carried the smoke away.

Where the bear had been was a hole six feet deep. The cabin was a wreck. Only parts of the further two sides and the chimney were left standing. And where was Uncle John?

Jim threw his eye around the landscape, hoping and yet dreading to catch sight of the old man's form; but there was nothing of the kind in sight.

He rubbed his eyes and tried again, in every direction. There was the bear's carcass, a dark blotch on the canyon side. There was the roof of the cabin tilted up

cold prickles all over him. Here in the broad daylight that streamed down into the canyon, which lay as bare as a city street, with the exception of single pines here and there, and the clump of quaking-asp in front of the one-time cabin, a one hundred and ninety-pound man had apparently been utterly annihilated, not so much as a scrap of cloth remaining to tell the tale.

It was unthinkable, the impossible done in a second, something beyond all human experience, and Jim stood with his jaw dropped, feeling that he was in a bad dream.

"You, Jim!" came a hollow summons. Keno Jim's nerves had been proved on many a field. It was told of him that when Bud Sanders opened on him at ten feet and missed him three times running, Jim simply said, "Poor work, Buddy! better take a club," which led to a reconciliation; but at this voice from another world coming so sharply into the silence that fell after the explosion, he leaped into the



But Uncle John shook his fist at him and reviled him earnestly.

against a tree, with a trail of odds-and-ends of logs, flour sacks, pieces of bacon, a frying-pan, and tin cans leading up to it; but not a sight of Uncle John.

It was most mysterious, and Jim felt

air a yard, and when he came down his knees scarcely supported him.

"Yes, sir!" he answered, looking straight up into the sky. "Yes, Mr. Porter!" for it is best to be polite with spirits.

"You, Jim!" continued the voice. "You worthless rascal! Where be ye? Come here, I say; d'ye hear me?" This was followed by a string of agricultural oaths that were of the earth, earthy. Surely spirits didn't use such language! Yet the voice, muffled and sepulchral, seemed to come from nowhere in particular.

"Uncle John!" cried the sorely perplexed man, "where in the Territory of Dakota are you at?"

"Down in Hank Peter's prospeck-hole, an' up to my scalp in water. If I get off my toes I'm a drowned man, so you come a-runnin', you lazy devil!"

"Lord!" cried Jim. "O' course! But who'd 'a' thought of it?" He ran among the ruins of the house and found a coil of rope, with which he galloped to the edge of the hole.

He looked down and there sure enough was the face of Uncle John.

"Where's the bear?" was the first ques-

tion the old man asked when he reached dry land.

Jim pointed.

"Where's the house?"

Jim pointed again.

"Huh!" grunted Uncle John as he looked from the one to the other, thoughtfully, feeling a bump the size of a biscuit on the back of his head, and mopping the blood from countless little cuts received from the flying gravel in the meantime. Then he stretched out his left leg cautiously, his face showing the pain it cost him.

After which he spoke.

"James," said he earnestly, "when you come to go over the circ'umstances, an' carefully calc'late profit an' loss, I don't care what kind of argyment you use; durn my hide if I can see how you're goin' to figger it so it don't come out there's a horse on us due to that there bear!"

THE WHEEL HIGHWAYS OF ONTARIO.

A TRIP FROM DETROIT TO MONTREAL.

By Robert Bruce.

ALONGSIDE that peerless chain of inland seas and rivers which is the boundary line between the Great Republic and the Dominion, from the Long Sault Rapids and the Thousand Isles to the Northwestern prairies, lie portions of six populous and busy States of the American Union. On the opposite side there is only the Canadian province of Ontario, whose unbroken waterway of over eighteen hundred miles is the gift of the St. Lawrence from less than fifty miles above Montreal to and through Lake Ontario, the Niagara River, Lake Erie, the Detroit River, the St. Clair lake and river, Lake Huron Sault Ste. Marie, and Lake Superior almost to its end.

In the swift and wonderful transformation by which, within the memory of living men, the finest fresh-water marine district in the world has become the home alike of commerce and adventure, the border States have established their leadership in trade and industry, yielding first place to the British provinces only in

nearly all things pertaining to pleasure, travel and sport.

Ontario is larger in area than all Spain, nearly as large as France or the German Empire; Sweden, Denmark and Belgium would together about equal it.

Hunting, shooting, fishing, canoeing and kindred outdoor sports hold sway in all parts of the province in their seasons, but more especially toward the north. Not so with the use of the cycle and automobile. A straight line thrown across from Ottawa to Collinwood on Nottawasaga (Georgian) Bay, or to Southampton on Lake Huron, would give below it the chief good roads system of Middle Canada.

Opportunities for enjoyable tours by cycle or automobile in the region below our imaginary line from Ottawa to Georgian Bay and Lake Huron are not surpassed by those of any other section of equal extent in the Western Hemisphere. A number of special conditions combine to render this so. The rivers and great lakes, for one thing, are within

Present arrangements between the League of American Wheelmen and the Canadian Government enable members of that organization to pass freely from Detroit to Windsor upon surrender for the time being of their unexpired membership tickets, the L. A. W. guaranteeing the duty on all machines recorded as so passed but unexported within six months. This is a convenience in some cases.

But it is well to bear in mind that another line of customs officers—this time in Uncle Sam's uniform—intercept the return journey. Explanation and duty are asked either way, and if one escape at the point of entry he may simply have reserved all the trouble for the point of departure.

The very best and safest plan is to carry sufficient funds to make such deposit as may be required when entering Canada, *i. e.*, 30 per cent. on valuations usually moderate—seldom over \$40 and never over \$50 on single machines. A regular form of manifest and receipt is given, which must be vised by a Canadian officer at the time of leaving the Dominion—from whatever port or point. This paper acts both as identification and pass into the United States, and is to be afterward mailed, vised as aforesaid, to the particular office from which obtained. A draft for the amount of the deposit is shortly returned and the transaction completed, at no expense and with little trouble.

Provision for expenses needs to be from \$2 to \$2.50 per day, plus \$12 or \$15 for deposit with the Canadian customs and a few dollars for incidentals. A total of \$50 or \$60 to start with ought to bring one through in good shape, from which he would finally save his deposit.

American money is as a rule taken at par in the larger cities of Ontario, but subject to some discount in the small towns in the interior.

Old Windsor is the usual starting point for tours across the lower portion of the province from points south of Sarnia (Port Huron), and is speedily left by Sandwich street to the old Talbot Road. Maidstone Cross, Essex Center, Cottam and Olinda are passed ere one is aware, when a dip is taken southward into Ruthven, thence east again and a northward bend into Leamington, thirty-three miles.

The roads thus far have been gravel and clay, heavy in wet weather but otherwise fairly good. Considerable swamp land is traversed, but raised roads and substantial culverts and bridges deprive it largely of the disagreeable features common in such districts. In the season of grape gathering, a half day's side trip by boat from Leamington to the vineyards and wine presses of Pelee Island, in Lake Erie, will be thoroughly enjoyed.

The Talbot Road will carry one through from Windsor to St. Thomas via Leamington, Blenheim, Clearville and Wallacetown, and this was the usual route taken by the high-wheel tourists in the late eighties and early nineties. They were more willing performers in the strenuous life than their successors of to-day. On account of the hills and sand stretches encountered on much of the last thirty miles of the Talbot Road to St. Thomas, most riders now take care to avoid it. In so doing it is recommended to proceed from Leamington to Blenheim, thence to Ridgetown and (turning to the left) across to the River Thames via High Gate and Clachan. The road taken will merge with the one running almost due east from Chatham to London at a point where a cluster of oil wells are observed near the road. Follow through Wardsville and Strathburn to London, entering via Victoria Bridge, Ridout and York streets. Distance from Leamington, 108 miles. From Blenheim to and past Ridgetown, upward of fifty miles, fruit orchards line the road on either side. When the trees are in bloom the whole section is one of wondrous beauty, and almost equally attractive at the time of harvest.

If it is desired to reach St. Thomas, either persevere via Clearville and Wallacetown (shown as an optional route on the map), or leave the London route at Ridgetown and continue through Duart, Rodney, Dutton, Sheddon and Fingal—Ridgetown to St. Thomas, fifty-five miles. Many prefer, however, to go through to London and south to St. Thomas rather than follow the harder road for the shorter distance.

London, the "Forest City," is the Hub of lower Ontario and the commercial as well as the geographical center of that portion of the province which borders the whole of Lake Erie and stretches be-

tween the St. Clair and Niagara rivers. Like its namesake across the sea, it is on the River Thames, in Middlesex County. Broad street's spacious parks and fine buildings are its chief feature, and an exceedingly attractive and fertile country is round about. The tradition, history and romance of the southwest peninsula are a part of the thought and life of the people, and the stranger is never long unaware that he is in a portion of the Dominion loyal to the Crown.

Leave London by Dundas street and London East to Thamesford, thence southeast to Ingersoll and northeast to Woodstock, passing Crumlin and Beachville. This route, being smoother, is preferable to the Hamilton Road via Niles town. Go out of Woodstock by Dundas street, east and southwest to Eastwood; take right fork to Cathcart and continue to Brantford. Leave Brantford on the direct road to Hamilton (78 miles from London) via Cainesville and Ancaster.

Good roads, more or less of macadam, are found all the way from London to Ingersoll and Woodstock, and to and beyond Brantford. The last few miles into Hamilton are in part of clay and at times sticky. Cycle paths help over the sand near Cathcart.

The approach to Woodstock is a descent of high hills, before beginning which it is recommended to stop awhile and take in the view. Beware, especially, of the steep hill into Hamilton—the "mountain," as the local riders call it. Keep the machine under perfect control or dismount.

Ontario's garden continues all the way from London to Hamilton and still extends in almost every direction. Like the "grape belt" in the State of New York, on the opposite side of Lake Erie, the climate of the whole region is modified by the near proximity of the lakes, and in every zone fruit is raised in prodigal abundance.

If the weather be favorable a fine view of the lake and surrounding country may be had from the hills round about Hamilton. In front and to the right are the waters of the lake, next in picturesqueness to Superior, dotted at times with pleasure and commercial craft. To the left as far as the eye can see is the Dundas Valley, a mirror of the peaceful rural life of the province. Hamilton is

at the head of navigation on Lake Ontario. Leave Hamilton by York street and the lake shore to Oakville, 22 miles. Here a choice of routes is offered. The northern one, via Trafalgar and Dundas street (28 miles), is the better, but the more interesting is a continuation of the lake-shore line via Port Credit (23 miles).

In Toronto, the "Queen City," Canada has the largest port upon Lake Ontario. Already a giant municipality, it is also fast-growing, ambitious, buoyant, vigorous and strong. Shorn of some special signs of British occupation and dominion, it would be American in all but name, and to-day nowhere else can one from the States feel himself so thoroughly at home. Splendid public and private buildings, parks, drives and pleasure grounds, both on and away from the lake, will amply fill spare hours or days.

TORONTO TO KINGSTON.

Kingston is reached from Toronto by way of King street (the local Broadway) or Queen street to the Woodbine track; thence in a northeasterly direction one hundred and seventy-three miles to that city, not far from the head of the St. Lawrence.

Planned long ago as an efficient and reliable means of trunk-line communication between the eastern and middle portions of the province, the Kingston road does not bend absolutely to the contour of the lake, as may appear from the map, though for the first hundred miles it is not far away. Many of the principal towns and cities are situated somewhat inland, connected perhaps with a smaller settlement near the water, not infrequently of the same name with "Port" prefixed. From Trenton to Kingston—about 80 miles—the wheel highway bridges over, as it were, the Bay of Quinte and the Peninsula of Prince Edward. Afterward it continues by a more definite angle toward the northeast—a grand course from beginning to end.

As one rides along he will involuntarily pause now and then, the better to take note of the scenes that open up before his progress. It is the upper New England coast over again, save that here there are fewer rocks and less ruggedness down to the water's edge; and the lake is clearer and bluer—especially far out—than the ocean. The sun lights up the Northumberland hills, the fields, roads and waters

together, revealing many a sail and now and then a stray funnel afar to the right. Every mile covered reveals new forms and charms of landscape; but the wondrous vigor of the air is at all times the same. It is the native breath from the Muskoka region not far to the northwest, wafted over hills and forests to mingle with the breath of Simcoe and Ontario and uncounted waters to the south and east.

Nights and mornings are chilly at all times of the year, but the days of summer are warm and bright. The ecstasy of forenoon and the calm triumphs of mid-day are lost in the healthful fatigue of late afternoon and evening. But the light that breaks after a full night's rest brings back the ecstasy again, and the end of the tour is scheduled to come too soon.

The roads are principally gravel and macadam—fair riding and good considering that they were dark forest trails not long ago. Side roads—now good, now poor—lead frequently down to the shore. Many streams seeking the lake level are crossed, and unmistakable traces of the beds of others long since dried up and made productive ground are seen on the broken surfaces of the rich, yellow earth.

It is more or less hilly to Whitby (28 miles), with some clay at Dunbarton and sand east of Pickering. Gravel, mixed at times with sand, continues to Bowmansville, four miles beyond which the road forks to the right for Port Hope (67 miles), Trenton (80 miles), and Colbourne (92 miles). With now and then a bothersome stretch there is naught but good wheeling into Belleville (124 miles), Napanee (147 miles) and Kingston, the ancient capital of Canada (173 miles), all distances reckoned from Toronto.

Each town and city passed has its special interest. Port Hope is a sightly little place, entrenched on high hills and in deep vales—the door to a vast region for sport to the north. You come into Trenton by Mounts Ossa and Pelion, and view Belleville and its environs twelve miles ahead in so doing. Belleville, at the mouth of the Moira, with nearby fishing and shooting grounds, tempts the cyclist who is also an angler. Kingston, the "Limestone City," is interesting from many possessions, Queen's University, military schools and unusual river and

harbor sights, including some old Martello towers guarding the entrance at the water front.

KINGSTON TO MONTREAL.

Henceforth you hold to the "river road" practically all the way from Kingston to Montreal and move side by side with the overflow toward the sea of one-half of the fresh water of the globe. The St. Lawrence is not only Amazonian in ever-increasing width, but in divers ways it overmatches expectation.

Its galaxy of isles begins immediately below Kingston and stretches down from fifty to sixty miles according as you measure the distance. The river is always some miles in breadth, now narrowing a little to become a series of rapids alongside some obstructing island, now widening into a small lake with the current through the middle of it. Many of the isles that stud the panorama of land and water have their villas, private yachts, piers and smaller craft galore, and the flags of two nations—and often more—are lifted to the breeze during the season.

Unless you take steamer part or all of the way beyond Brockville, you will miss the excitement of "shooting the rapids." But the all-wheel route leads beside and around them and will give a better general idea of the country. If a round trip to include both can be arranged, so much the better. Of the most famous rapids there are four: Galops, just below Prescott; Long Sault, beyond Dickenson's Landing; Cascade, off Perrot Island, at the junction of the Ottawa with the St. Lawrence, and the Lachine, immediately above Montreal.

By careful study of the time tables of the steamers up and down, and some calculation, one who elects to wheel all the way may arrange without much loss of time to be upon the opposite shore when the "shooting" takes place. If thus fortunate, he will witness great passenger ships tossed about on the turbulent waters as were the barques of the Indians who guided the explorers of the long ago over the same route.

There is some rough country beyond Kingston, but the average is perhaps equal to the average of American roads.

When conditions are most favorable you may start from the "West Point of Canada," on the time of the Brockville

boat, and very likely beat it to its pier. Ontario street leads out of Kingston to the barracks and across the long bridge to the river road. It is fair to good macadam to beyond Gananoque, then poor, though the approach into Brockville (49 miles) is excellent.

The river road to Dickenson's Landing is very picturesque and comfortable wheeling, with some sidepaths in and about Cornwall. From here on, the St. Lawrence is wholly in Canadian territory. Water street out of Cornwall and the Montreal road take you to Vaudreuil (160 miles), via Summerstown, Curry's Hill, and Coteau, alongside Lake St. Francis. The interprovincial line is crossed just beyond Curry's Hill and the

wheel highways of Ontario are left behind.

Gravel, clay and sand so combine as to make the first portion of the last twenty-six miles difficult where there are no sidepaths. Across the Ottawa River from Vaudreuil is St. Anne's, then Pointe Claire, Lachine, and finally Montreal itself—186 miles from Kingston—over ideal ways.

The tall towers of Notre Dame are seen from afar off as one approaches the "Royal City" by either the upper or lower Lachine road, and become more and more distinct with the lessening of the intervening miles.

At the Victoria Jubilee Bridge the 623-mile trip comes to an end.

WHEN LOSING IS WINNING.

A STORY OF A HARVARD-YALE BOAT RACE.

By L. C. Howe.

THEY had climbed the steep, sandy hill from the little station at Gale's Ferry. From the distance came the last faint shriek of their train as it rounded the bend on its way to New London. The girls, in white duck suits and sailor hats, were laughing and talking with the half-dozen great, bronzed members of the 'Varsity crew who had come to meet them, and Phyllis Russell was walking with Townsend, the manager of the crew, as they reached the top of the hill and turned into the winding street of the sleepy little village.

"So this is Gale's Ferry," she exclaimed, drawing a long breath as she gazed at the wide river spread out before them, with wooded hills beyond, and in the foreground the great white house on the top of the bluff. Through the open windows of the Quarters came snatches of songs and loud talking. Several men in flannels were lying on the grass under Captain Brown's famous cherry trees. When Townsend and his friends appeared, however, they sprang to their feet and came forward to welcome the visitors to Broadview.

"Come and see the view from the summer-house," begged Townsend, after they had settled Phyllis's aunt on the

piazza with several of the old "grads" to amuse her.

As they strolled across the grass to the edge of the bluff, Phyllis saw some one sitting on the railing with his back toward them, reading a newspaper so intently that he did not seem to notice approaching footsteps. As they got nearer, a certain familiar look about the absorbed figure made Phyllis stop, and the color flamed into her face, then surged back again and left her white. Before she could turn away Townsend called out: "Hullo, Norcross, turn round here and don't be so unsociable. I want to present you to Miss Russell."

For a minute Leonard Norcross looked as though he intended to drop off the top of the bluff, then he swung his legs over the rail and came forward.

"Miss Russell and I have met before," he said, quietly, shaking hands with her, with a white, set look about his face. "I did not know that you were one of the party coming down from Norwich. I thought you were still abroad."

"I didn't know you knew Norcross, Miss Russell," exclaimed Townsend, interrupting him, "or I should have told you before that he was here. Weren't we in luck to get such a famous old ex-

captain to help us out when the regular coach went home ill last week? What did you find so interesting in the paper, Len? You looked so absorbed that I don't believe the last trump would have made the slightest impression upon you."

"It was a highly edifying report of 'What is going on at the Yale quarters,'" explained Norcross. "I wish I had that ingenious young romancer of a reporter here. I was absorbed in trying to find one single word of truth in the whole two columns."

They strolled over to the summer-house, and just at that moment some one called "Townsend." Townsend excused himself, vaulted the railing and disappeared.

still no? This is the last time I shall ever bring the matter up. I must have it settled once and for all *now*. I may not have the opportunity again of seeing you alone, and I want you to tell me finally. Is it yes or no?"

Phyllis was startled and flushed a little angrily at the determined look about Norcross's square jaw. "I won't be bullied this way," she said to herself. "He has no right to be so peremptory about it. That's no way to win a girl. It is overbearing. I won't have it! I won't!" And yet all the while her heart was battling with her pride—she longed so to capitulate to this besieger. She looked up at him again through her long lashes. There



Phyllis looked about her nervously as though she meditated flight. There was a long silence, broken only by the laughter and talking of the group under the trees and the faint lapping of the water against the float below. Finally Phyllis looked up shyly at Norcross, as he towered above her, seemingly bigger and broader than usual in his white flannel suit. His arms were folded and he was looking down at her with such a seriously sad look in his eyes that she longed to run away.

"Phyllis," he said at length, in a firm, almost cold tone, "have you changed your decision since I saw you? Is it

was a still grimmer look about his mouth. "What is my answer?" he asked again. "Don't keep me in this suspense, Phyllis."

"I haven't changed my mind," she said in a low tone, clasping and unclasping her hands nervously. "I am very sorry, Leonard, to hurt you——"

"Ah, Phyllis, I have been looking for you," exclaimed a voice near by, and Geoffrey Connor came into the summer-house. "I'm sorry I couldn't meet you, but I had to go down to New London this afternoon and just got back. This is nice, to see you again."

"You will excuse me, Miss Russell; it's time the crew were out," said Norcross;

adding, "I believe Townsend intends to ask you all to go out in the launch while they are being coached. Will you come?"

"No, I think I'll stay here, thanks," replied Phyllis, in her most frivolous way, smiling upon Geoffrey. However, as Norcross ran down the worn stone steps in the side of the steep hill, to the boat-house below, there were tears in her eyes.

"Dear old Norcross!" said Geoffrey, watching him disappear. "I didn't know you knew him, Phyllis. Isn't he indeed a splendid chap? I tell you, there are mighty few men in this little world that are worthy of blacking Leonard's shoes. He's changed a lot, too, in the last few months—grown so serious and sad. I'd put up my last cent on there being a girl at the bottom of it all. Always is, if there's any trouble in the world, you know."

"What a wise old philosopher you are getting to be, Geoffrey," rejoined Phyllis, laughing constrainedly. "How worldly wise!"

"Come down and see the new shell," called out several as they passed the summer-house on the way down to the float. "We're going out in the launch, Phyl; come on."

"Thanks; no, not now," replied Phyllis, leaning over the railing and talking to those below her. "I am lazy and I'd rather stay up here and talk to Geoffrey. *Bon voyage*. You don't mind, do you, Geof?" she asked, turning to him. "I really would rather stay up here and see the crew go out."

She perched on the railing with her back against the pillar and watched the others stroll into the long, low boat-house close by the shore. Through the great open door she could see the fragile-looking shells lying in the dark, cool depths of the boat-house; she could hear the girls' little exclamations of delight as they touched the smooth, polished wood and the glistening steel of the outriggers and marveled at the strength of the 'Varsity shell, which in a few short days would be cutting through the water in the great race with Harvard.

The *Yale* lay puffing and panting at the dock and the 'Varsity eight came filing down from their quarters to the boat-house. It was time for the evening's practice. Phyllis watched the girls

as they were helped down into the low-lying launch and settled themselves in the stern. The substitutes and managers sat about the edge ready to explain every nautical technicality. It was nearly sunset. The waves slapped up against the great piles of the pier under the fresh breeze from the west. A yacht came steaming up from New London and dropped anchor opposite the quarters.

Norcross came out of the boat-house and walked down to the launch in his manly, dignified way. Phyllis watched him as he spoke to the engineer and then went to the bow and joined the other coaches. There was a serious, anxious expression on his strong, handsome face.

"Do you know, Phyllis, I think it will finish Leonard if we don't win this race," said Geoffrey, after a long pause. "He has set his heart on it so. He seldom fails in anything he makes up his mind to do, and it would be a fearful blow to him. Not that I think there's any danger of our defeat, however, for I believe Yale never was in better trim for a race. There, they're off!"

The bell rang, the engine started and the launch pushed away from the dock and waited at a little distance for the crew to follow. Then the eight big, brown fellows came out of the boat-house and down the float, bearing their long polished shell. At a signal it was lowered into the water and they took their places and pushed out from the float.

Norcross raised his megaphone and gave an order, and the launch cut through the waves, leaving a foaming wake behind.

With the oars rising and falling rhythmically the shell looked like some graceful sea-gull winging its way over the waves. The sun was sinking lower, nearer the western hills where the sleeping shadows lay. The smoke from a passing train was tinged orange; the blackening waves were smoothed into tiny ripples.

"So you think Mr. Norcross will be fearfully disappointed if we don't win?" asked Phyllis, coming back to the subject after another long pause, while they had watched the shell, a mere speck on the water down below the Harvard quarters.

"Think so? I know it," returned Geoffrey. "It would go hard with him

to start for South America with a Yale defeat weighing him down." Phyllis turned startled eyes to his.

"To South America? Geoffrey, what do you mean?" There was a world of pathos and despair in her voice; for once she was startled out of her usual self-possession.

"Yes, he has a fine opening down in Chili. He would have gone sooner if he hadn't been asked to help us out here with the crew. He said he'd see Yale win this regatta and then he'd get as far out of the world as possible. He seems to be in a reckless sort of mood. As I said before, Phyllis, I'm afraid the old chap has been hard hit. *You* know him; have you ever heard of anything of the sort?" Geoffrey turned his honest, boyish eyes on Phyllis's face, and she hated herself as she felt the hot blood mounting into her cheeks.

"I did hear something of the kind," she said, turning away toward the river. "But he will probably get over it—men usually do. Look, Geoffrey, at that sky. Isn't it a marvel of color?"

Banks of flame-colored clouds were drooping over the hills across the river. In the clear blue sky overhead one little ashen-gray cloud changed to rose color. The pink-tinged waves lapped languidly below. The river, like a mirror, reflected the pageant of the sky as it floated on down to the sea. Myriad fire-flies glistened here and there, and as the glow faded into the dusk of evening, the moon came out from behind the clouds and silvered the waves. Far off, the lights of New London gleamed in the darkness. Then the evening calm was broken by the gay laughter and talking of the girls and men on the launch, the deep far-reaching sound of the megaphone, and the throb, throb of the engine, and from the purple distance emerged the shell, the oars glistening in the moonlight. In the quiet evening they drifted inshore, and one heard the rattle of the oars as they were drawn in, and the voices of the crew as they lifted their shell and disappeared in the boat-house.

"Well, Phyllis, my dear," cried Mrs. Russell, coming into the summer-house, "it's time we all went to our train. I have been having such an interesting time listening to Captain Brown's yarns. He has been showing us his little cabin out

here where he sleeps. He says he can almost imagine he is on a ship when he lies there in his bunk and listens to the wind roar and the waves slap up against the boat-house down below. Why, Phyllis, how white and tired you look! Are you quite fagged, poor child?"

* * *

The gayest day in Eastern Connecticut's calendar, the day of the Yale-Harvard regatta, dawned bright and clear. By the time the *Sea Queen* had steamed down to New London, the river was alive with boats of every description. It looked quiet and peaceful enough over at the Yale quarters as they passed. The great blue flag on the flag-staff fluttered languidly in the soft summer breeze. There was a little stir down by the boat-house, but it was not yet time for the crew to bring out the shell.

As they came in sight of New London harbor, however, a gorgeous pageant burst into view. As far as the eye could reach, tall masts stood out against the blue sky. The wide harbor was a glowing mass of color; white sails and flags of all nations, and blue and crimson bunting, vied with the turquoise sky and the sapphire sea. Above hung the great draw-bridge, a graceful network of slender cables, looking very like a cobweb from the distance. They passed excursion steamers packed with people from stem to stern, yachts draped with crimson and blue, tugs filled with excited, shouting college boys; even rowboats and canoes threaded their way between the larger craft, which were all anchored in two long lines, leaving a narrow path between.

As the *Sea Queen* steamed slowly to her position not far from the finish, the guests crowded to the rail to watch the scene. It was an old story to most of them, and yet it was just as beautiful and gay and exciting as when they saw it for the first time. Music from the great excursion boats floated over on the breeze; the shouts of the rival collegians rent the air now and then. The river was sparkling in the sunlight; the sky was an unbroken expanse of deep blue; a little breeze was filling the sails of the yachts and catboats, and ruffling the water just enough to keep the waves dancing in the sunshine.

Phyllis looked pale and worn. There

were dark circles under her brown eyes that betrayed sleepless nights. She had done more serious thinking during the last week than she had ever done in her twenty-two years before. She had decided that, after all, she could not get on through the rest of her life without Leonard's strength to lean upon and trust in, and yet her pride refused to let her tell him so. She felt that he must despise her as a heartless coquette, and would never believe in her again after her vacillation. He was so steady, so strong himself, that he could not understand her weakness. She was sure of herself now, however. Ever since Geoffrey had told her that Norcross was going to the other end of the world she had known that she could not forever go on living without him.

She was standing a little apart from the others, looking with weary eyes up the river toward the far-off Yale quarters, when a shout came faintly over the water and was passed down the closely-packed lines of boats, until it grew in volume to a deep roar. It was a blending of the cheers of the two universities. Every one rushed to the gunwales. The great steamers tipped ominously as the crowds surged to one side; the bands stopped playing.

Far down the narrow path of water, kept clear by the revenue cutters, two little specks were seen, almost indistinguishable except for the rhythmic flash of the oars, as the sun struck their dripping blades. On either side of the river the long, brilliantly-colored observation trains wound slowly in and out by the curved line of the shore. Softened by the distance, came the roar of the cheering from the thousands of spectators on the cars. But no one noticed the beautiful scene shut in by the gently rolling Connecticut hills; the spectators' horizon stretched no further than the two long, slender shells that were cutting through the water toward the drawbridge.

The mile flag was passed. No one dared ask which was ahead; from that distance one could not tell. Suddenly one boat shot ahead a little. Silently, eagerly, the multitude watched it. The shouting had almost ceased; the tugs no longer blew their shrill whistles; the cannon were still.

Phyllis stood leaning breathlessly on

the rail, with her eyes fixed on the Yale launch followed close behind. She knew Norcross was there with the other coaches, watching anxiously.

The second mile flag was reached. Now one boat was a half-length ahead. It was Harvard's shell! Phyllis covered her eyes with her hands and half sobbed. "If Harvard wins," she whispered, "I will tell Leonard that I've changed my mind again. I'll let Fate decide it. I can't let him have two disappointments." She laughed hysterically and watched eagerly through the glasses.

"Gad, I believe Harvard's ahead," exclaimed the man next her in a tone of despair. She tried to hide her look of delight, and felt disloyal as she thought what this defeat would mean to her friends.

The third mile flag was passed. With a sudden spurt Yale's boat shot forward. The bow was opposite the stern of Harvard's shell. The Yale stroke increased and the boat came abreast of Harvard. It was only a little way now. Phyllis's teeth bit her lower lip. She was almost overcome with the terrible strain. Slowly, inch by inch, Yale dropped back. Nearer and nearer they came. Then, amid a wild roar of sound that echoed and re-echoed from the surrounding hills, the Harvard shell forged ahead, and, with a half-boat's length of clear water between her and her rival, crossed the line.

Phyllis sank down on a seat near by. Tears were in her eyes. She did not hear the disappointed exclamations of her friends, nor did she notice the men in the Yale shell as they sank back on their seats, despair and weariness in every attitude. One man buried his face on his crossed arms and sobbed. Another rolled over in a dead faint. The launches came alongside; sweaters were pulled on and the crews were helped aboard to steam quickly back to the quarters. But Phyllis saw none of these things. She had staked her life's happiness on a mere chance, and she had won.

Finally, she heard Geoffrey say, "I see the launch is making for the dock over there. Len told me that he would take the first train for New York after the race and start as soon as possible for Valparaiso. The only chance we've got to see him is to waylay him now and keep him with us and help cheer him up. He

is in a terrible state, and I know this defeat will about finish him."

"I don't believe you can get him to change his mind if he has once made it up," said one of the men. "You know what Norcross is—regular adamant."

"Geof," whispered Phyllis, coming up behind him, "I want to speak to you one little second." They walked back to the stern. Her face was flushed and she spoke rapidly. "Geof, will you help me out? Do you remember saying that there was probably a girl at the bottom of Leonard's trouble? Well, there is, and I think if you will wait while I scribble a little note, that he will not go to South America. Do you understand?" Her eyes were shining with tears as she looked up into his face. Geoffrey whistled softly.

"Well, Phyllis, I am glad you have come to your senses at last," he said. "How could you ever have treated him this way? Take that note? I'd swim from here to Valparaiso to get it to him. Quick; I'll have a fearful time catching him once he gets ashore in that mob."

So they landed at New London and Geoffrey disappeared in the crowd, which filled the great docks from the water's edge to the station. The observation trains had discharged their loads of passengers and the specials to New York and New Haven were rapidly filling and

pulling out of the station. But still the crowd increased.

Phyllis watched the people with unseeing eyes for a little while, and then turned and looked over the harbor, where the golden light from the west gilded the sails of the yachts. One or two warships were in, and many boats of the New York Yacht Club were anchoring for the night.

She did not see the little stir in the crowd near by, made by two tall, broad-shouldered men pushing their way to the yacht. Not until she heard Norcross's voice as he spoke to his friends on the boat did she turn around. Then she stood there, a little apart from the others, with her hands clasping the railing behind her, and the color coming and going in her face.

He came to her eagerly, and stood between her and the curious eyes of the others as he held both her hands.

They said not a word, but turned and walked slowly to the bow as the yacht sailed into the open Sound. The glassy sea spread out into the sunset. Soft opal tints of water and sky were blended into one indescribably exquisite harmony. White yachts, looking like phantom wraiths in the soft twilight, were standing out to sea. Sweet music floated over from the steamers as they drifted on into that sea of color.





Mineola Sheer Plan.

THE NEW SEVENTY-FOOTERS.

A PRACTICAL RACER-CRUISER CLASS.

By W. E. Robinson.

ASIDE from the fact that they will furnish the best of sport, not only to their owners, but to yachtsmen at large who eagerly follow, even if they cannot participate in such racing, the four 70-footers designed by N. G. Herreshoff, respectively, for August Belmont, Cornelius Vanderbilt, W. K. Vanderbilt, Jr., and Harry Payne Whitney, are a most interesting quartette, for they are the latest development of the one-design idea, as well as the largest and most expensive class into which that idea has yet been carried.

Built at the Herreshoff shops at Bristol, R. I., from one set of plans and specifications, the yachts were, when delivered to their owners, as alike as peas in a pod, so that whatever of superiority may be shown in the season's racing must come from individual skill in sailing, in handling, in "tuning up" and in attention to the hundred and one details which count in the career of a successful racing yacht.

Yet it is not simply for the purpose of trying the skill and ability of their respective skippers and crews that these four yachtsmen have built their boats alike. The real reason lies deeper than that, and is to be found in the tremendous cost of a modern racing yacht and her comparative uselessness for anything but racing.

It may seem strange to speak of the cost of a yacht as being a potent factor in the plans of millionaire yachtsmen; but when it is considered that even the wealthiest man desires some return for his money, and that he would get very little beyond a single season's sport out of a modern racing yacht of the style of

Defender and *Columbia*, it will be found that there are good and sufficient reasons for even wealthy men taking to such a class as the one that is now attracting widespread attention in the yachting world.

Time was when a yachtsman could build a boat of moderate cost, solid construction, and reasonable sail plan, that should serve him equally well for racing and for cruising, and that could be sold at any time for a fair proportion of her original cost, but that day has long since passed in the open classes.

Unless an owner enters a class in which there are some restrictions on sail, ballast and construction, he is confronted not only with the necessity of a racing machine, lightly constructed and requiring a large crew to handle her enormous sail plan, but also with the probability that she will be outbuilt the following season by a more extreme machine, and that she cannot then be sold for anything like a fair proportion of her original cost. If the owner wishes to keep the head of the class he, too, must build a new boat, and so on until the limit is reached.

The history of American yachting in the past few years shows that the limit of the willingness of owners to build "machines" has been speedily reached, and that a most healthful reaction for the benefit of the sport has come in the shape of the restricted and one-design classes, in which the aim is to secure to the owner a boat that should be available as a prize winner for a second, or even a third season, and that could be sold for a cruiser when her strictly racing days were over.

Notable instances of success in this line have been the 21-foot knockabouts and raceabouts that have given Boston and Marblehead yachtsmen excellent sport for half a dozen years past, and that are finding equal favor with New York yachtsmen; the 21-footers that gave good racing in New York and Newport half a dozen years ago, and lastly the Herreshoff one-design 30-footers that have given their owners the best of sport at Newport for three successive seasons, and are still so evenly matched as to make it impossible to pick a winner on any given day they race.

The 70-footers are the result of the application to a larger class of the ideas and conditions that made racing in the smaller classes so interesting. They should furnish just as good sport and be in every way as satisfactory.

In what is here said concerning one-design or restricted class, it should be remembered that it is comparative and not actual speed that makes racing interesting, and that good fun is to be had in a class where all the boats are nearly equal in speed, regardless of whether or not some one in another class is a little bit faster.

This does not mean that the boats in a restricted or one-design class must necessarily be slow. In fact, the contrary has been the case in all the classes thus far tried, and the boats built in this way have proved no mean competitors for anything of their length except the extreme racing machines. It means only that the extremes of construction and sail plan are done away with, and that in their place has been substituted craft strong, safe, easily handled and saleable. They will not be as fast as boats designed specially for racing in an unlimited class, but they will nevertheless be sufficiently speedy to show their sterns to anything of their length now afloat, while at the same time they are strongly built, have comparatively small sail plans, can be handled with a small crew—fifteen as against *Columbia's* forty—and have good and substantial cabins in place of the light wood and canvas makeshifts that serve the out-and-out racer. All in all, they are a class that will bear watching on the points named.

The first of the class to be launched was August Belmont's *Mineola*, and it

was from her that the accompanying illustrations were made. What may be said of her is true of the others, and one description answers for all.

Mineola is 106 feet over all, 70 feet on the water-line, 19 feet 8 inches beam and 14 feet draft. She carries about 40 tons of lead on her keel.

In model she is much like *Columbia* on a smaller scale, except that she does not go to the extremes of power necessary in a yacht built to defend the *America's* Cup against all comers, and which must be absolutely the fastest thing of her inches afloat.

While retaining *Columbia's* characteristically fine lines, *Mineola* carries but about half as much lead and swings aloft a sail plan less than half as large as that on the latest cup defender. Yet at that she would probably be a good match for the cup defenders of a dozen years ago, and undoubtedly faster than the yachts that once made the racing in the 70-foot class decidedly interesting.

A look at her sheer plan and midship section shows at once her resemblance to *Columbia*, and the differences between the modern yacht and that of even ten years ago. The cutting away of the under-water body both in the lateral plane and in the section is very marked, while the thin keel with its bulbed lead at the bottom shows the close approach made by even the cruising yacht to the canoe-hull and metal fin of the fin-keel racer.

There are speed and beauty in every line, both above and below the water, and the latest Herreshoff features are very much in evidence.

Particularly above the water-line is *Mineola* a handsome boat. Her sheer is the same as that of *Columbia*, and hence gives the same impressions to an observer. *Defender* was deemed to have a graceful sheer when first she appeared in public in 1895, but *Columbia* went her several points better. *Columbia's* sheer forward was of such a character as to give her the appearance of lifting herself to meet an oncoming wave. Her speedy and "floaty" look forward was much easier to appreciate than to describe, but it was patent to all who saw her.

Mineola is a chip off the same block in this respect, and is fully as handsome in every other way. She is painted white above the water-line and green below.

Her name appears in gold letters on a stern that is as much a reminder of *Columbia* as are the other features of the hull.

Mineola is of composite construction,

of nickel steel, and show the same bulb on the web or inner part of the angle as gave strength to those in *Defender* and *Columbia*. The whole scheme of construction is light, yet strong and solid.



"Mineola" Under Full Sail.

with steel frames and deck-beams and wooden planking. *Columbia's* sheathing was of Tobin bronze, but wood is cheaper and just as serviceable where extreme speed is not the main object in view.

Mineola's frames and deck-beams are

The lead keel is firmly secured by long bolts through the wooden keel and the steel keelson, and there is considerable interior bracing and strapping to complete the strength of hull. The deck is of white pine, and the deck fittings in the

way of hatches and skylights are of mahogany.

A low rail runs around the deck and is outlined on the yacht's topside by a gold stripe, a bit of ornamentation which was not deemed necessary in *Columbia*, but which is, nevertheless, a great addition to the looks of *Mineola*.

Columbia was flush-decked from stem to stern, but *Mineola* has a small cockpit aft. Its floor is about 15 inches below the deck, so that the latter makes a seat. The cockpit rail is planted on the deck about a foot and a half away to complete the effect of comfort and convenience. In the forward end of the cockpit is the steering wheel. All that can be seen of the steering gear is the wheel on a horizontal shaft projecting from an upright cylindrical brass box, upon the top of which is the binnacle, but below is a gear similar to that first shown on *Columbia*, and one of the many typical Herreshoff inventions to be found aboard.

The rudder post comes up through the hull of the boat at an angle of 45 degrees, and its point of entrance is made watertight by a stuffing box of special design. To the head of the post is fixed a steel quadrant extending aft at right angles to the post. Bevel teeth in the outer arc of this quadrant engage similar teeth in a wheel fixed to the lower end of an upright shaft. A similar wheel on the upper end of the shaft engages the teeth of a wheel on the horizontal shaft on which is fixed the steering wheel.

The only variation from *Columbia's* gear is that the steering wheel is on the after instead of the forward side of the box, thus allowing greater freedom of movement on the part of the helmsman. He stands in the cockpit when at the wheel, and is thus well out of the way of the boom as it swings low overhead.

The mast is 78 feet long. Of this length 71 feet is above the deck, 14 feet being in the masthead. The mast is stepped below the deck in a steel cone of the same design as that in *Columbia*, a further assurance of strength and stability. The mainboom is 75 feet long, gaff 42 feet 9 inches, topmast 47 feet and spinnaker pole 58 feet 6 inches. The bowsprit is 25 feet in length, of which 18 feet projects outboard.

These spar dimensions show a sail spread for measurement under the N. Y.

Y. C. rules of about 6,000 square feet. *Columbia* carried 13,000 square feet. The sails were made in the Herreshoff sail lofts, and are of a specially woven and fine quality of cotton duck. They are of the fashionable "cross-cut" variety, in which the cloths of the sail run at right angles to the leech instead of parallel with it as in the usual style of sail. The rigging is of wire, both for the standing and the running gear, and in its disposal and fittings has many Herreshoff "wrinkles" to secure lightness and at the same time strength to resist the many and varied strains to which it is subjected.

For interior accommodations, *Mineola* has a sizable cabin amidships with two staterooms aft and two forward of it, together with all needful lockers, sideboards and toilet conveniences. Forward there are a good galley and ample berthing space for the crew. The sailing master has a room of his own. The fittings and furnishings are plain but in good taste, and owner, guests and crew can live aboard very comfortably.

Just to show that money is freely spent by the owner where it is really needed, *Mineola* is accompanied by an 80-foot steam yacht as a tender for towing, for carrying spare spars and gear, and for taking her owner to and from his sailing yacht if she does not happen to be in the particular port in which he finds himself.

Mineola's tender is called *The Scout*, and is of Herreshoff design and build, very speedy, and decidedly rakish in look. She, too, has good cabin accommodations. A speed of 20 miles an hour is a fair rate for her to maintain. She is painted white, and has a cabin house of mahogany with brass trimmings.

The personnel of the owners of the 70-footers is as interesting as the yachts themselves. All are racing yachtsmen and have owned fast and successful boats. August Belmont has won many prizes with his forty-footer *Mincola*, a clever design from the hands of the late Edward Burgess, while Cornelius Vanderbilt and W. K. Vanderbilt, Jr., have raced considerably in the once popular 46-foot class. Mr. Whitney has raced in both the 21-foot and the 30-foot classes.

With such owners the racing will be keen and exciting. The yacht clubs ap-

preciate this, and have made special dates for the class, while the New York Yacht Club has so changed its classification as not to compel the 70-footers to race against *Columbia* or *Defender* should they be brought out.

Most of the racing of the class will be done at Newport, but the races and runs of the New York Yacht Club's annual cruise will give them an even

wider opportunity for racing; and in turn and to the benefit of the sport at large.



"Mineola," Stern View, on Railway.

their presence will add much to what is considered the principal yachting event of the season in years in which an *America's Cup* race is not on hand.

A successful season is therefore assured for a class that in itself not only promises sport, but also bids fair to set an example of a way in which cruising and racing may be combined in one boat to the satisfaction of the owner

THE STROKES OF GOLF.

PUTTING.

By Walter J. Travis, Metropolitan Champion.

IT is a matter of common knowledge that I have perhaps experimented with more kinds of putters than any other player in this country, and should therefore be expected to have at least learned what not to do.

I have tried wooden putters, gun-metal putters, straight-faced putters, cylindrical putters, mallet-headed putters, putting cleeks, cleeks, left-handed putting cleeks—in short, the whole family of every conceivable kind of weapon that human ingenuity has evolved for the purpose. I have tried them all in every imaginable position—off the left leg, standing square, off the right leg, facing the hole; have had them equipped with long and short shafts with straight faces, with varying degrees of loft and, antithetical-

ly, with the face turned in—and, at times, have putted extraordinarily well with each and every member of the tribe. I have tried putting with cut, with a follow through, with a chip, with a tap; with the hands taken well away from the ball before striking it, and the reverse; with light grip, with firm grip, with the left hand only, and again the right gripping firmly—all with varying degrees of success.

The sum of it all is, that my experience shows conclusively that the really good putter is largely born, not made, and is inherently endowed with a good eye and a tactile delicacy of grip which are denied the ordinary run of mortals. At the same time, less favored players may, by the adoption of methods which have

stood the test of actual experience, materially improve their game.

There is no royal road to the hole. Some men play well in the most awkward and contorted positions—positions which seem to invite a lack of success. Their success, however, proves that by whatever means the result is brought about, one thing is clear—the face of the club must have met the ball squarely at the crucial moment of sending it on its errand—which is the essence of good putting. That's about all there is in it: to strike the ball truly in the center and with the necessary strength. There is no mystery about it. If the ball is struck exactly at the central point in line with the hole, by the middle of the club, with the face of it at right angles to the line to the hole, and kept so for an inch or so after the moment of impact, it is bound to go straight.

This double-barreled problem, however, of striking the ball truly and with the requisite strength is not by any means so easy as it would appear. While wrestling with the question of true striking, the equally important matter of force to be applied intrudes itself, and it is extremely difficult to consistently succeed in getting both factors to work harmoniously. More often it happens that when the line is right the force applied is either too weak or too strong—generally the former—and when the force is right the line is wrong.

This matter of strength is infinitely harder to regulate and control than that of striking truly; and little can be said which would aid this weakness other than that the player, having measured the distance with his eye, should invariably en-

deavor to allow the muscles to act upon the information so conveyed. After the eye has told the muscles what they are to do, leave the matter entirely to them. Too much employment of the eye is ruinous to good putting. The first estimate is usually the correct one. Prolonged studying of the distance or the character of the turf induces conflicting opinions as to the necessary strength, and this halting, undecided state of mind is fatal. There is no definiteness of purpose; the player is see-sawed between the prospects of being away over the hole or equally short, and with such vacillating mental forces at work the stroke is usually a failure.

Putting is largely mental, and on this account becomes so difficult. The novice who has not back of him recollections of scores of missed putts a couple of feet or so from the hole is more apt to bring off a putt of this distance, especially on a keen green, than the other fellow. He is not troubled with any thought of being a yard or more away on a miss, and in blissful ignorance confidently bangs away and holes.

Confidence is a prerequisite to good putting. Some players naturally possess this quality in a greater degree than others—and accordingly are better putters. This heaven-sent gift may, however, be cultivated and developed to some extent—primarily by at all times allowing the hands to be strictly governed by the first impression produced by the eye in the calculation of the necessary force to be exerted, and secondarily by practice, preferably by playing against an opponent, which is far more valuable than solitary practice.



No. 1.—Ball Nearer Left Foot.



No. 2.—Ball Midway Between Feet.
From Instantaneous Photographs.



No. 3.—Ball Nearer Right Foot.

We all know how easy it is to knock your ball in with the back of the putter three or four feet away when the hole is won or lost—when it doesn't make a particle of difference if the ball doesn't go in. It is pretty much the same when putting alone. The metal attitude is different. It is so easy to run a putt down in one when you have two for the hole, and equally easy to take two when you have one for a half to win. "Why is it, papa," asked the little girl, "that when you have two for the hole you always go out in one, and when you have one for the hole you always take two?" Confidence on one hand, and lack of it on the other. Therefore, too much solitary practice is not conducive to good putting when under the strain of a tight match.

There are putters and putters. If a man putts poorly it isn't so much the fault of the club as of the putter—"the man behind the gun." A naturally good putter will putt fairly well with any old weapon. At the same time, I am of the opinion that the best all-round results can be secured by a putting cleek, with a pretty short shaft. The slight loft on the face enables the player to strike the ball more firmly—and firmness and decision are here invaluable. The face, being somewhat laid back, imparts a back spin to the ball, which is very helpful on a keen green. This is due to the fact that the ball is struck below the center, and the spin asserts itself in a large degree after the more dominant propelling power of the stroke exhausts itself. The result is that the ball does not travel so far as it would off the regular straight-faced putter. In the latter case the point of impact is just a shade above the center, and a rotary spin is given the ball in the direction of the hole. It will thus be apparent that with the straight-faced club the measure of force applied to cover a given distance is less than that employed with a putting cleek, and greater delicacy is required. The fear that one may overrun the hole on a keen green often leads to a weak, flabby sort of stroke, lacking both direction and strength. Weak strokes of this kind are not so common with a putting cleek, where you are obliged to hit the ball a bit harder.

Allusion has been made to a short shaft. It seems to me that a short shaft possesses several points of merit. The

principal one is that the stroke must necessarily describe a truer circle because a smaller one, thereby increasing the chances of the ball being struck truly. Take, by way of illustration, a hoop of large diameter and place it in front of you, letting the part touching the ground represent the head of the club, and the center the hands. Now do the same thing with a much smaller hoop, and observe the difference. With the latter it will be found that in reference to the line from the ball to the hole the segment of the circle in the same plane is much greater. In other words, the club-head is moving longer over the line to the hole with the short-shafted putter, and there is less likelihood of the ball being diverted from that line than when the longer-shafted club is used.

It is, of course, possible, by standing very erect, to get the longer club to move along in much the same circle as the smaller one, but apart from the fact that this will bring the heel of the club over and run the toe into the ground, there is not the same command over it. In short, there is greater margin for error the farther the hands are removed from the head of the club.

There is another point also in favor of getting down to the ball—you are not so liable to take your eye off at the critical moment of striking. This is a fruitful cause of many a miss. It is rather a good plan to go to the other extreme and keep your eye for a second on the place where the ball was, after striking it. Looking up a fraction of a second too soon induces a tendency to pull the hands around to the left somewhat. This is usually attended by a slight circular curl described by the ball in the last few inches of its roll, to the left of the hole.

Reference has been made to the three leading positions assumed. The first illustration shows the ball close to the left foot; the second about midway between the feet, and the third with the ball nearer to the right foot. There is no particular advantage in any one of these styles. All are affected by good putters—and poor ones, too. It is, of course, a matter of personal choice. Simply because A putts well off the left foot is no good reason why B—who putts equally well off the right foot—should seek to change his style.

As a matter of fact, very many really good putters humor themselves and affect one or other of the alternative positions when they find themselves doing poor work—frequently with good results. It is proper to state that the effect on the ball is not the same in each case. In playing off the left leg a shade of loft is put on the ball by reason of the face of the club being slightly laid back, while playing off the right foot causes the club to present a more perpendicular face and makes the ball hug the ground more closely.

A word or two respecting the grip.

Generally speaking, the club should be held pretty firmly with the fingers of both hands—firmly, not tightly. A very tight grip robs the fingers of the guiding sense of the necessary strength. If anything, the grip of the right hand should slightly predominate. A firm grasp seems to give a truer run to the ball, which is not so liable to be deflected from its proper course by any irregularities of the surface of the ground. A loose grip is more apt to cause the ball to run in a wobbly, indecisive sort of way, and is less effective except you be playing on a very true and consistent green.



Addressing.



Top of Swing.



Finish of Swing.

DRIVING.

By Charles B. Macdonald.

GOLFERS who have recently taken part in or heard discussions on the correct form of driving, know that there is the widest divergence of opinion as to the most desirable style—that is, the one giving the best results. Whereas there are only two or three recognized correct methods in putting and approaching, there seem to be almost as many different styles in driving as there are individuals.

For years the form of the veteran Allan Robertson and of young Tom Morris stood as a model for those seeking to attain perfection in the game; but in these days, golfers are hopelessly at sea when they attempt to instruct the beginner in driving. They are lost in explaining the various grips, stances and swings. The very grip which has always been considered orthodox, and concerning which two

varying opinions have never before been ventured, is not used by either Vardon or Taylor, the two most remarkable players of the present day. The overlapping of the fingers was, I believe, never attempted before Taylor and Mr. Laidlay adopted that style.

Instantaneous photography has enabled us to study more in detail the reason for long and straight driving. In the old days the driving was more of the character of *sure* and *as far as possible*. To-day it is *far* and *as sure as possible*. While 20 years ago 180 yards was considered the average length of drive for professional champions, to-day 200 yards is nearer the usual distance. This can be attributed neither to the clubs nor to the balls. In my opinion, it is due to the scientific manner in which every muscle of the body is made to utilize weight and

momentum at the moment of striking the ball. The man who drives the straightest and longest ball is the one who accomplishes to the greatest perfection the follow through, and the timing of the stroke. Timing of the stroke is a phrase which has become known to the golfing world only in late years, and really refers to the instant you throw your wrists forward on the change of your center of gravity at the moment of the club-head's contact with the ball. That is the beginning of the follow through. To do this as perfectly as Vardon does, one gets anywhere from 20 to 30 yards' longer ball.

Many golfers claim that Vardon violates all the laws of golf. As a matter of fact, he violates none, so far as I have been able to discover. His follow through is the most perfect I have ever seen. Any one who may pick up a photograph of his position after the follow through, will see that the position of his body shows an absolutely straight line along his face, right shoulder, left hip, left knee and ankle. This is rarely true of any other of the leading golf players.

The Finish in the accompanying photograph is not correct, for the body is not forward with the leg—that is, in a straight line. The end of the swing is far more important than the beginning. The address and the backward swing are simply poising one's self for the purpose of striking the ball correctly. There are two or three positions in which one can stand to the ball, none of which is essential in getting a long ball. Some get a longer ball in playing off the right foot than off the left, and *vice versa*. A heavy man will play off the left foot because it comes easier for him to follow through and he is less liable to slice, while a youthful man, who is supple, will probably get better results playing off the right leg, as he can follow through more easily. There are as many intermediate positions as there are intermediate weights, but the stance is not a very important matter.

As for the backward swing, the best results are usually found in a man turn-

ing well up on his right toe, giving him greater freedom of action when it comes to timing his stroke for the follow through. In this respect the accompanying photograph is also incorrect, as the subject plays from the side of his foot, as does also Mr. Harriman.

It is not necessary for a player who has a three-quarter swing, such as Mr. Harriman, to turn so much on his toe, for he does not need to describe the same arc as one taking a full swing.

Pure strength never accomplishes long driving. In men who drive the longest balls, you will usually find the muscles of the back, forearm and wrist well developed, while the development of the upper arm is not pronounced. The wrists play the most important part at the moment of timing of the stroke, which is, in a very large measure, the secret of very long driving.

The questions most frequently asked are: What is a long drive? What is the longest drive?

One hundred and eighty to two hundred yards is a long drive. Conditions, of course, direction and velocity of wind, and slope of ground, go toward creating distance in the drive. Mr. F. G. Tait's record drive of 351 yards was made over frosty, hard ground. The conditions under which this drive was made remind me of a well-authenticated story of a drive made on the Ardsley-on-the-Hudson course.

At a 300-yard hole at Ardsley, where the course slopes from tee to putting green, an enthusiastic golfer was playing one windy day over ground covered with sleet. The ball was on a snow tee. The player made a labored and terrific swipe at the ball, narrowly missing it. The wind from behind, together with the current of air created by his exertion in trying to hit the ball, caused it to roll off the tee, and the wind blew it over the slippery, icy surface, until it finally reached the putting green and rested near the hole.

When asked the longest drive, I like to tell the foregoing story.



Address $\frac{3}{4}$ Iron Shot.



Top of Swing for $\frac{3}{4}$ Iron.



Finish $\frac{3}{4}$ Iron.

APPROACHING.

By H. M. Harriman, National Amateur Champion.

THE iron shots in golf, to my mind, are the most important strokes in the game. They vary in distance anywhere from one hundred and sixty yards to within thirty yards of the hole, and may all be classified under the general heading of "Approach shots."

Personally, I prefer for these different shots a light iron, or mid-iron. I find that I am much steadier with this club, and play shots more confidently with it than with the mashie. I think, also, it is best to use the same club for the various shots as much as possible, and for approaching in general the mid-iron is the club, excepting, of course, when a steep bunker has to be negotiated, with the hole lying only a few yards beyond. On such an occasion the mashie is practically a necessity.

I think one can be more accurate and certainly much steadier by keeping his approach shots as close to the ground as possible, pitching only where there is necessity to do so. This is most certainly true in all short approaches, ranging from one hundred to thirty yards of the hole.

In the case of long shots with the iron requiring a three-quarter or full swing, I like to throw the ball well in the air, as I think you have more chance of holding the green, unless, of course, you are playing into a strong wind; then the ball must be kept low, to gain the required distance.

It is hard to lay down any special rules for approaching, as almost every shot you

make in the course of eighteen holes will be made under different circumstances, and much must be left to the player's judgment; for instance, the distance, allowance for the wind, character of the ground between your ball and the hole, the lie of the ball, etc. All these things must be taken into consideration.

Strange to say, the approach shot is the stroke that beginners seem to practice least, although it is the most difficult and, at the same time, the most necessary stroke in the game.

Beginners, or even moderately good players, would do well to discard their wooden clubs entirely for a while, and play a few rounds with their irons; familiarity with your club gives confidence, and, when this is obtained, success generally follows.

A great deal may be said in regard to the choice of clubs for the approach. There are many different kinds on the market, namely, the medium iron, the mashie, the gigger, and that abominable club called the loftier. Of all these, the mid-iron is the best and the most practical, simply because, by changing the length of your swing, you may cover any distance from the hole up to one hundred and forty or fifty yards. Get one with the face laid back sufficiently for all practical purposes, but bear in mind that the less the club is lofted the steadier you will become with it.

Many beginners feel that in making a

lofting shot they must have a very much laid-back club, and besides, they must in some way, either by the lifting of the arms or dipping of the body, give the ball an extra impulse to rise. Be sure not to do this.

If the ball be properly hit, the club will give the elevation needed without any additional help from the player.

The mashie should not be tried until one has thoroughly mastered the light iron.

The position of the feet in the short game is quite different from that required in driving, or any of the full shots.

Beginning, say, at thirty or forty yards from the hole, the line of the feet should be at an angle of nearly forty-five (45) degrees with the line of the ball's flight, so that the player may face the hole as much as possible without cramping his swing, and the ball should be played more off the right foot than the left. Hold the club firmly with both hands, a little more firmly with the right than in other shots, the shoulder and forearm being used, and not the wrists only, as is generally thought to be the case.

As you increase the distance to the hole, change the angle of the feet correspondingly; lengthen your swing until you



Top of Swing,
Full Iron Shot.



Finish,
Full Iron Shot.

reach the full iron shot, for which the position of the feet, hands, etc., is the same as in driving.

The follow through in approaching is, perhaps, the most important part of the whole

stroke. Unless, in the case of the short approach and at the finish, the hands, shoulders, club—in fact, everything but the toes of the right foot—are pointing to the hole, the result will seldom be successful.

In playing to a hole when a strong cross wind is blowing, for which you must make allowance, always play to some object to the right or left of the green, as the case may be. I have seen some very good players, after changing their stance to make this allowance, still keep their eyes on the hole itself. This will always occasion a slice or pull, as the club does not go through in the proper line of flight.

To sum up: To learn to approach, select a light iron and use that alone. The less loft your club has and the shorter

your stroke, the steadier your game. Use, if possible, the same iron for the various shots. Keep your eye on the ball, be sure to follow through well, and, above all, do not force.



Address for Short Approach.



Short Approach.

THE WAY OF THE SPORTSMAN.

By Caspar Whitney.

This is the season in which it is unlawful to kill or have in possession quail, grouse, pheasant, prairie chicken, partridge, plover, snipe, wild fowl, or deer. Restaurants which serve this game are liable to legal prosecution and fine; and people who eat it abet the work of the game butchers and defeat the efforts sportsmen throughout the country are making to provide needful protection for our game birds and animals.

American Athletes at Paris.

Although several colleges and one or two athletic clubs have, on various occasions, declared their intention of sending teams abroad this summer, yet, at this writing, there is certainty of only two—Princeton and Pennsylvania—competing in the Paris games, the second week in July. Either team is amply qualified to sustain American prestige, and together, so strong will the combination be, that it may reasonably be doubted if an amateur from any other country will succeed in winning more than one, or at most, two, events on the long programme.

Pennsylvania's past and present team includes Tewksbury and McClain for the sprints; Bushnell and Drumheller, middle-distance runs; Orton and Grant, distance runs; Hare and McCracken, weights; Baxter, high jump; Kraenzlein, sprints, hurdles and broad jump.

Princeton's team includes Jarvis, sprints; Perry, middle distances; Cregan, half and one mile; Carroll, high jump; Coleman and Horton, pole vault.

This means that America will be represented in almost every event by a champion, as the following records indicate: In the 100 yards, Tewksbury, .10s.; Jarvis and Kraenzlein, .10 3-5s.; 220 yards, Tewksbury, .21 3-5s., Jarvis, .22 1-5s.; quarter-mile, Jarvis, .50 4-5s., Cregan, .50s.; half-mile, Cregan, 1.58 2-5, Perry, 1.59 1-5; one mile, Cregan, 4.23 3-5, Orton, 4.23 2-5; two miles, Grant, 9.51 3-5; 120-yard hurdles, Kraenzlein, .15 1-5s.; 220-yard hurdles, Kraenzlein, .23 3-5s.; high jump, Carroll, 6ft. 2in., Baxter, 6ft. 2in.; broad jump, Kraenzlein, 24ft.

4½in.; pole vault, Coleman, 11ft. 5in., Horton, 11ft. 4in.; 16-lb. shot, McCracken, 43ft. 8½in.; 16-lb. hammer, McCracken, 153ft. 7in.

Except in the quarter-mile and hammer, this is as strong a university combination as could be made. Either Boardman (Yale) or Long (Columbia), with records of .49 3-5s. and .49 2-5s. respectively, could win a place with ease in the quarter, as could also Plaw, the remarkable California university hammer thrower. Prinstein (Syracuse) might divide honors in the broad jump with Kraenzlein, but I doubt if he will ever become the record holder so long as the great Western athlete continues in practice.

Chances at the English Championships.

Some of these men will compete in the English championships, and, though the change of climate and excitement of sight-seeing must be taken into consideration, yet they ought to win the majority of events they enter. The quarter and half are the dubious events, if England is as strong as usual, but Americans should win the sprints, hurdles, jumps, and with Cregan, the one mile, although there are good Englishmen at this game. There are usually an Irishman or two of great strength and skill in the weights, and perhaps these also should be reckoned among the losses; but even so, the majority of wins still rests with the Americans; and, moreover, it is to be remembered that Sheldon, ex-Yale, has several times within the last year or so successfully competed at English games in the weights. The English championships also include a four-mile

run and a two-mile steeplechase, in which Grant and Orton will have a chance—Grant especially.

It is said that a team to be sent to the English championships and to Paris is contemplated by the New York Athletic Club; and the probable make-up given out includes Duffy, the Georgetown sprinter, at present under suspicion as to his amateur status; Boardman (Yale) and Long (Columbia), the former for the 220 and the latter for the quarter; Manvel, half-mile; Spraker, high jump; Flanagan and Sheldon, weights.

Except in the weights and quarter-mile, this team would give Americans no events of which they are not already assured. Furthermore, it is to be hoped that the New York Athletic Club will appreciate the impropriety of including on its team one man (Duffy) whose amateur status needs clearing, and another (Flanagan) who, having landed in America from the Emerald Isle only a couple of years ago, is hardly qualified to now represent the country of his adoption against the country of his birth. None but native-born athletes should be eligible to international teams.

**No
Sunday
Athletic
Meetings.**

It is very gratifying to American sportsmen that the Paris Exposition authorities finally decided to abandon Sunday athletic fixtures. No doubt the firm stand taken by Princeton, seconded by Pennsylvania and Mr. Spalding, the American Sports Director at the Exposition, was quite the most persuasive influence which fell upon the Frenchmen—who are fully alive to the *éclat* that will be given the games by the attendance of American university athletes. Whatever they may do in France, there is no section of the United States where clubs of the first class hold organized sports of any kind—track athletics, baseball, football, golf, or rowing—on Sunday.

In quarters where no general half-holiday on Saturday is observed, sports are held on Sunday by certain classes of clubs whose members have no other leisure day; and none can take exceptions to the custom—better good wholesome sport than corner loafing. But no association governing any branch of sport tolerates open competitive games on Sunday, and no club of a desirable class in the United States, would give them.

**Notable
Intercollegiate
Athletic
Championships.**

In the matter of general performance, the Intercollegiate Athletic Championship games decided at Columbia Oval, in New York, this year, were perhaps the most notable of any in the twenty-five years of the association's history. Not before have there been so many men of a thoroughly high grade. With the exception of two hurdle events, in which the remarkable Kraenzlein outclassed all others, and in the two-mile run, where Grant distanced his competitors, there were no events in which the winners' superiority stood out so prominently as to make the contest uninteresting. This is rather unusual, and shows to what high standard college track athletics are being developed. The meeting was also made especially noteworthy by the appearance of the California university team, which, although composed of exceedingly good class athletes, had no member save its hammer thrower, Plaw, equal to taking a first prize. At this game, however, the Californian was quite remarkable, and is certain to become a world's champion when he has attained his ultimate skill and his muscles have grown harder.

From first to last the performances were of a high order, which is the more noteworthy, considering the conditions of the day to have been a steady downpour of rain, and a consequently heavy track.

The individual honors of the day were won by A. C. Kraenzlein, who secured first place in the 100-yard dash and in both hurdles, second place in the broad jump, and, all told, earned eighteen points, the greatest number ever won by an athlete at these games. But there is little doubt that this point-winning effort, together with wretched weatherly conditions, operated against the making of a new record in the running broad jump. Had the conditions been different, no doubt Prinstein would have broken Kraenzlein's present record, which the latter could probably not then have bettered in his tired condition.

**High
Class
Work.**

As an indication of the general high class of athletes entered—there were five men in the high jump all with records of 6ft. and over, and yet the winning performance of 5ft. 10½in. shows how miserable were the conditions. Cregan's mile within 4m.

24 2-5s., only one second behind the intercollegiate record, was a magnificent performance. It shows what this athlete can do when the time is ripe. Grant's two-mile run in the record time of 9m. 51 3-5s., was another exceptional piece of running on a track so heavy.

Long's defeat by Boardman in the quarter in time (49 3-5s.) only one-fifth second slower than the intercollegiate record, was not only a most praiseworthy performance in itself, on a track so heavy, but especially noteworthy in disclosing the possibilities of Boardman at his best. He ran with pluck and judgment. He was able to stay with Long at the high pace the latter invariably cuts out at the start, and at the finish he ran him to a standstill, by sheer nervous force.

H. H. Cloudman, Bowdoin, having previously won the New England 100-yard and 220-yard college championships in record times, 10 1-5s. and 22 1-5s., was expected to be a factor in the running at Columbia Oval, but, though he saved himself for the 220, he secured no better than fourth place in 22 1-5s.—a further indication of the high quality of the competitors.

A complete summary of winners and performances will be found in the Record Department.

The Unimpressiveness of Harvard and Yale. Perhaps the most surprising feature of the day was the unimpressiveness of Harvard and Yale, either in particular events or on general results. Although Harvard had previously beaten Yale in dual games, the Crimson did not get within six points of the score made by the New Haven athletes in the Intercollegiate championships.

Princeton's showing, taking in consideration the size of her team in comparison with that of the larger ones from the other leaders, was, perhaps, the best of the universities, and indicates that the signs of athletic development, which have been given from time to time this season, were not without substantial backing. I observed, too, a great deal of excellent material among those that did not show in the winnings, and no doubt we shall hear much more from Princeton track athletics in the future than in the immediate past.

Pennsylvania was indebted for her success to the performances of one man more

than any of the other teams entered, and from an all-round point of view was by no means so much stronger than either Harvard or Yale, as the disparity in scores would suggest. Despite her winning only 14 points, Harvard had, perhaps, the most evenly-developed team on the field, and yet failed to carry off a single first place—an experience a Crimson track team never before had. Kraenzlein may be said to have won the championship for Pennsylvania.

Western Intercollegiate Championships.

The Western Intercollegiate meeting proved to be not only the most evenly-contested the West has held, but the closest of any in the athletic history of the country. Only three points separated first from third.

Michigan revealed unexpected strength which, together with the good sportsmanship on the part of Burroughs in declining to enter a contest for which he was not eligible, and which lost points for Chicago, gave Ann Arbor enough advantage to assure victory. Four Western Intercollegiate records were broken, and the meeting was signalized by better management than that of last year, and was entirely free from the scandalous scenes of 1899.

Harvard's 'Boating Advantages.

Because of some promising developments in strokes and coaching systems, university boat racing is sure to be more absorbingly interesting this season than usual, and unless present signs (June 12th) are misleading I confidently expect the Harvard-Yale race to be much closer than it was last year. Indeed, as I write, the Yale eight appears to be sending their boat along so smoothly between strokes, and with a suggestion of such power, that it is not at all improbable they may finally attain skill entitling them to an even chance for victory. Crews sometimes improve, or fall off, very rapidly in the last ten days.

Yet all the season's advantages have been Harvard's—and certainly the majority of chances for success at New London (June 28th) rightfully are hers, for Harvard has rounded out one of the most successful rowing seasons in its history. The club system inaugurated originally by Mr. Lehmann, has proved of immeasurable benefit, not only in bettering the quality of the 'varsity, but in im-

proving the general quality of Harvard boating. There has never been a season at Harvard, or at any other American rowing university, where so many men offered themselves for the various boats, or where there was so much of good rowing, as was the case at Cambridge this year. At one time there were no less than twenty-six eights rowing on the Charles every afternoon. What this means in the final making up of a 'varsity may be appreciated.

Harvard's present 'varsity, therefore, is the pick of some score of eights after a season of rowing and racing, and it had, up to the time of leaving for New London, the further advantage of rowing daily with one of the best second crews in college boating this year.

These are tremendous natural advantages, which, so long as they exist, ought to give Harvard the balance of favor in the annual race with Yale.

The times have changed, indeed, when we find occasion for surprise at the lack of enthusiastic encouragement given rowing at Yale by the general student body. And yet such has been the situation this year. A great effort was made to introduce the club system of rowing, which has met such eminent success at Cambridge, but at New Haven the attempt was nearly a complete failure. The response from the undergraduates was so indifferent as to force the coaches back to the old time-honored system of hammering a crew out of a limited number of candidates.

Fortunately for Yale, nearly all of last year's crew had returned, and the eight men who sat in the '99 boat were, with one or two exceptions, perhaps, an exceptional lot of oarsmen. Therefore, with no thanks whatever to university support, Yale is represented this year by a thoroughly good crew, and one, I believe, to have possibilities.

The experimenting of last season, and the lessons it taught, had their effect, and this year Yale has a stroke with none of last year's breaks. It seems to differ, too, from any Yale stroke I recall; it appears to combine some of the elements of the old Yale, Cornell '97 and Pennsylvania 1900 strokes, and is a striking illustration of the gradual working by all universities to a common stroke. The great emphasis of the old Yale catch, appears to be missing, but there is the beautiful re-

cover which characterized many old Yale crews, and the legs are jammed down and the power at the end of the stroke apparently accentuated more than I remember to have seen it.

The greater effort seems to be made after the pin rather than before it, which is new to Yale style; but the boat travels along very smoothly, and while it had attained no remarkable speed, when I saw it (June 9th), yet there was all the suggestion of pace coming in good season.

Yale's Freshmen are a very promising lot, and ought to pull out a victory.

The Harvard stroke this year is about the same as the one of last year, except that more emphasis is made of the catch and the slides start back quicker. This, at the time I saw the crew, in the first week of June, gave the impression of the stroke being slighted at the end, which will no doubt be corrected, since its continuance would be serious.

The Harvard stroke, I should like to say here, is not, as generally supposed, at all the one in its entirety which Mr. Lehmann taught; but rather has the English principles, implanted by Mr. Lehmann, fitted to American needs and ideas, as expressed by Mr. E. C. Storrow, and, is, in my judgment, a more speed-giving and less tiring stroke than that employed by oarsmen at Oxford and Cambridge.

From the very first of the season the crew's blade work has been excellent, the beneficent effect of club rowing being evident in the higher average of watermanship, and its speed very fair. But Harvard has had her troubles, too; earliest and perhaps most serious of which was the loss of Tilton and the seeming difficulty of getting the boat to run smoothly between strokes, and of getting the men together. A great deal of work remained to be done when Harvard started for New London. Although there is so much to indicate a Harvard victory, I must say the Yale crew is one which, even so early, suggests to me great possibilities; of course it may never get beyond the mere suggestive stage; on the other hand, it is the sort of crew that would not surprise me by developing into a winner.

Interest in the Poughkeepsie races (June 30th) this year centers around the struggle for first place by Pennsylvania, Cornell and Wisconsin. Columbia, which be-

Harvard's
Stroke
Not English.

Yale's
Need of
Support.

The
Hudson
River
Races.

gan the season with as good material as ever presented itself, seems again the unhappy victim of an inefficient stroke and internal dissension. Columbia has experimented with strokes for so long, and received, meanwhile, so many lessons of their impracticability, that I may be forgiven the thought of it being high time one lesson at least was committed to memory. The resignation of the coach within two weeks and a half of race day, if voluntary, is shameful desertion, and if requested, seems repairs at the wrong end of the season. Columbia does not deserve the hard luck she has been having lately, and should enlarge her governing committee to include practical men of each sport and perfect its machinery of control.

There is no break in Columbia's stroke this year, as last, but it lacks driving power. The men row in excellent form, as, in fact, they did last year, but there is the want of speed-giving qualities on both ends. Somehow Columbia's stroke seems always to lose at both ends.

Chances at
Poughkeepsie
Favor
Pennsylvania.

Pennsylvania's crew is quite as good as last year in its personnel and work; in fact, it seems a little better, for there is noticeable improvement in getting the blades into the water and in the recover. The old Pennsylvania stroke rowed the blade into the water; this year I have observed it is being put in squarely, and, therefore, begins sooner to be of propelling service to the boat without losing any of its power at the finish. The great strength of the Pennsylvania crew is its uniformity; the blades catch the water together and the men get on their power together, while the recover is exceedingly easy and smooth. In fact, the Pennsylvania crew is a fast one.

The Pennsylvania crew is pulling beautifully together, and reported to have been breaking all the records on the Schuylkill. Yet I must feel, despite the fact of its being considered the likely winner, that, if it is hard pressed by a crew which gets a little more power on at the catch, and has a good swing and slide, there is a good chance of the Red and Blue being defeated.

Cornell's
Good
Work. It is very difficult to accurately judge the ultimate capabilities of a crew from its work a month before race day; yet Cornell's 'varsity just now gives every suggestion

of a return to form somewhat approaching that of the '97 crew. Great effort has been made this year at Ithaca to increase the boating spirit, and nothing has done so much in that direction as the Francis Boat Club, with its object of affording rowing facilities to those not good enough to be taken on as 'varsity candidates.

There are excellent men in this year's boat, and its form is so much superior to that of the '99 crew as to make Cornellians hopeful of the outcome on the 30th. Although realizing fully the speed-giving qualities and the smoothness of Pennsylvania's stroke, as rowed by its veterans of '99 and 1900, I confess to preferring the Cornell stroke, and must believe that, other things being equal, it will always win out.

Wisconsin also has a veteran crew this year, five of the 1900 eight having been in the boat at Poughkeepsie which in '99 came so near to winning. The man who coached them so well last year, however, has been replaced by O'Dea, and it remains to be seen whether the change has been for better or for worse. If for better, Wisconsin will very likely win, for the '99 eight was one of the best that has rowed on the Hudson. It seems a long way to come for a race, and, though we admire Wisconsin's pluck, I wonder if the same energy put in at home would not arouse boating interest sufficiently to create an unusual regatta on Western waters.

Harvard's
Baseball
Reversal. With the second, and last, game of the Harvard-Princeton series in mind, it is hard to understand how Harvard won the first (4-0) at Cambridge. The responsibility for so great difference in Harvard's form at Cambridge (May 26th) and at Princeton (June 13th) is not to be placed wholly on the pitcher. In the first game the nines were very evenly matched in general play, although Princeton's was always the more spirited and telling; but in the second game, Harvard's general work, especially with regard to the infield, was of quite another and a lower class than her rival. The Princeton environment seemed quite to unnerve Harvard; inexcusable fumbling was frequent, opportunities for double plays ignored and second base poorly covered.

Some of this, no doubt, was due to the hammering Princeton was giving Stillman, the Harvard pitcher, but a great deal of it came from a lack of baseball

sense. At the end of the fifth inning Princeton had made nine runs, and Harvard one—the result of a three-bagger which, but for wretched coaching, would have been a home run. Then Harvard replaced Stillman by Kernan, and Princeton made no more runs—the final score being 9-2 in their favor. Although this was the poorest exhibition Harvard has given since having attained form, yet it shows the team's weakness, and changes the chances of the Yale series from favoring Harvard to favoring Yale.

Yale's battery, as a unit, is no stronger than Harvard's; perhaps Robertson or Garvan (while not having the promise of Harvard's two freshmen pitchers) are a shade, at present, stronger than either Stillman or Kernan, but Reid is so much more valuable a back-stop than either Cunha or Sullivan, as to more than counter-balance. Yale's infield, however, is the stronger, and the general play of the team keener and more resourceful. In batting there is little choice, and that little, perhaps, favors Yale.

Princeton Entitled to First Honors While the lack of a third game leaves Princeton without an official 1900 victory over Harvard, yet there can be no doubt in the minds of those who have followed the season's work of the teams that Princeton has the strongest all-round nine in university baseball, and is fully entitled to all the honor that goes with that distinction. Nor is Princeton's success due especially to unusual skill in any one direction. True, its battery is the strongest, but of no such preponderance as alone to answer for the nine's victories. Princeton's especial strength, in my judgment, has been its team play, abetted by consistent and excellent batting, and the spirit and baseball sense which has characterized its work from first to last. Though not able to bat Stillman in the first game, they analyzed his curves with telling precision on the second encounter. They outplayed Yale in the first game at New Haven 9-3, and in the second, at Princeton, they held their form, while Yale accumulated 4 runs by errorless play, and then in the ninth inning, by a superb rally, which demoralized the Yale pitcher, actually batted out five runs and a winning score of 5-4.

Brown seems to have relied too much on its pitcher to have realized its possibilities, which, at the beginning, sug-

gested first honors. Still, its record is a fine one; it has beaten Harvard twice (3-0 and 3-2) and Yale twice (5-1 and 7-3), Princeton once (6-1) and Pennsylvania once. It has lost to Pennsylvania (2-11), Princeton (6-11), Yale (1-5), Wesleyan (1-11), and to Dartmouth (3-6). It has not rounded out, as the other teams, and I doubt, if it met Harvard and Yale now at the top of their form, if the early season successes could be repeated. Pennsylvania has made a fair showing, winning and losing a game each with Brown and Cornell, but losing twice (5-9 and 1-6) to Harvard and once to Chicago. Cornell made its best showing against Pennsylvania, since which time it has done nothing notable.

Athletics in the Naval Reserve. The movement on foot to organize an interstate naval militia organization is of so worthy a nature that every one should lend it a helping hand. Whatever can be done to prosper the Naval Reserves should commend itself to every American citizen.

The object of the proposed organization is to encourage practice in fencing, shooting, boating, and such other sports as appeal to the sailor boys.

Incidentally, I may add that a little stir is also making in the United States Navy towards encouraging athletics among the sailors and marines. The introduction of athletics in the army has had such marvelous effect on the physique and endurance of the soldiers that its great value can no longer be ignored, even by officials of narrow vision.

West Point-Annapolis Football. The conclusion of arrangements for a football game next Autumn, between the national Military and Naval academy elevens, will be pleasing news to all sportsmen, for of all the season there is no game to match this one in sportsmanly conduct. It will be again played on Franklin Field, Philadelphia, under the auspices, as before, of the University of Pennsylvania, and will, no doubt, be equally as well managed.

If these teams must play on a neutral field, there is none better than that of Pennsylvania; but it is too bad they cannot agree upon home grounds.

The baseball and track athletic seasons at both West Point and Annapolis have been unusually satisfactory this year; they always labor under great disadvan-

tage, but enough material has been developed in 1900 to make the outlook hopeful.

The New Seventy-footers Under Canvas. With the exception of the Payne-Duryea boat, all the new seventy-footers have been out under sail sufficiently to give some suggestion of what their behavior is likely to be in moderate winds. Judging from the exhibition to date, these boats are not primarily racers, which is most gratifying intelligence to yachtsmen, who have had more than enough of the racing machine. They are not powerful boats, from a racing-view point, but are, instead, moderate weather craft, with ample ability to sail out the average strongish winds of the summer racing season.

Mineola (Mr. August Belmont) has had the greatest amount of sailing, and seems rather tender; though in these first days of rope and sail stretching no definite judgment may be formed. *Rainbow* (Mr. Cornelius Vanderbilt) appears especially quick in stays and swift on a reach, and *Virginia* (Mr. W. K. Vanderbilt, Jr.) thus far shows no characteristics differing from the other two of the class.

Mineola defeated *Rainbow* in the New York Yacht Club's Regatta, but the winds were too fickle to make the result conclusive.

That they will furnish excellent sport next month seems assured.

Canadian Superiority in Lacrosse. It is a somewhat notable fact that the very highest development of skill in lacrosse continues to be revealed in Canadian rather than in native American play. This, undoubtedly, is explained by the great popularity of the game across the border, as compared with its struggle for existence in the United States. The only American team to have attained to skill equaling the best Canadian, is the one which has represented the Crescent Athletic Club, of Brooklyn, for a number of years. But this can hardly be called an American team, since half of the members, at least, are old Canadian players. The American leaven, in numbers or quality, is scarcely sufficient to give it nationality. Still Americans, individually, have shown greatest skill in the game, and, given equal time as football or baseball, there is no doubt we should develop lacrosse teams of an equally high order of playing skill. Just now there is much hope for a new and growing interest in

the game; the colleges appear this year to have taken it up more seriously than hitherto, and that means its popularity. It is the very best of games—quite as sport-giving as football, and infinitely more attractive for the spectators. In the college season, Columbia beat Harvard and tied Pennsylvania; Cornell beat Columbia and lost to Harvard; Harvard beat Cornell and tied Pennsylvania—thus honors seem pretty evenly divided. Lehigh beat Stevens.

The Crescent team has annually met the leading Canadian teams, and for the last three years been victorious. This year, however, after beating the Capital Club of Ottawa, which for four years of the past six has held the Dominion Championship, and the Toronto University team 11-3, it was beaten 8-7 by the Markham Club, the present champions of Ontario, and by the Montreal Club, 13-5, which had previously been defeated by the Capitals, of Ottawa. The Crescents did not do themselves justice, but, on the other hand, the Canadians gave as fine an exhibition of fast team work as we have ever seen. Lacrosse needs an official to penalize foul play, which seems growing.

Some Polo Lessons. It cannot be said that the present polo season has thus far carried on the development and the promise shown last year among the second and third-class teams. So long as players are permitted to go from club to club, the natural development of the game is sure to be retarded. But the early season play has given some striking object lessons in the significance of class and in the need of team work to any combination seeking tournament honors. One of these lessons was administered by Devon—G. W. Kendrick, 3rd; C. R. Snowden, George McFadden and Charles Wheeler—at Philadelphia, to the so-called Lakewood team, the first week in June. If Lakewood had settled upon its team at the first of the season and practiced steadily, it might have developed its mediocre individual material into team play that would have accomplished something among the second-class teams. As it is, it has made no impression whatever; and developed neither material nor team play. It is just where it was at the beginning of the season, and it might really have accomplished a great deal, if Mr. Gould had realized the lack of individual skill

at his service and had set himself to building up a genuine Lakewood team.

Quite an opposite experience is that of Devon, which has clung to its own material, originally unskilled, and brought out finally a team which stands in the fore rank to-day. Among the season's second teams the same may be said of the Rockaway junior combination, which includes W. A. Hazard, R. La Montagne, Jr., D. F. Savage and F. T. Canover, Jr., or Albert Francke. Much of the success of this team must fairly be given Mr. Hazard—not especially for his work in the saddle, as for patient and persistent effort to hold the men together, and to accomplish something which would develop the club's ready material.

**Interesting
Championship
Tournament.** The progress of Devon through the championship tournament—June 25th to July 5th, on the Prospect Park field, Brooklyn—is sure to hold the interest of sportsmen. Its play this season has been marked by such excellent team work, that it is sure to win from any combination, which, as many do, rely on individual brilliancy. At Philadelphia it permanently won the Alden cup after twice beating, on even terms, a Lakewood combination, which included the Waterbury brothers, and gave Rockaway II a two-goal beating, on top of allowing them seven goals.

Dedham is another of the clubs which has become prominent through clinging to home material and developing team work; it made an excellent record last year, though it has shown no play yet of so high a quality as revealed by Devon.

Westchester and Meadow Brook and Myopia will be represented by veteran teams. Meadow Brook, in its loss of the late C. C. Baldwin, is weaker than last year, but still strong enough to make the outcome among the three most uncertain. None of these first teams has yet shown the quality of play it disclosed in 1899.

Among the entries for the Junior Championship, which, by the way, has not filled as it should, Rockaway seems to be the choice, although Philadelphia will send a strong combination that may furnish some surprises. Curiously enough, Lakewood—which belongs in this class—is not entered.

Troop A—E. Colby, R. G. Douglas, H. S. Kip and H. M. Earle—has made its polo début, and, considering the inex-

perience of its material, put up a very creditable game against a Westchester Country Club combination. The game ought to thrive among volunteer cavalry everywhere in the country, as it does in the English service.

**America
vs.
England
at
Lawn Tennis.** Although an international lawn-tennis match for the Davis Challenge Trophy is not at this writing (June 14th) assured, yet the Englishmen have signified their willingness to accept the conditions governing play for the trophy, and promised to send over a team. Hitherto English players have come here on their individual responsibility, but this time the English Association governing the game has the choice and direction of the team.

The conditions of the international match call for two men in singles and one pair in doubles on each side. No English selection has been made yet, but it is not unlikely the Doherty brothers, R. F. and H. L., and Dr. Eaves, will comprise the team. The brothers make the strongest doubles combination in Great Britain, while R. F. is equally formidable in the singles. If the American team is chosen on the form and ranking of last year, as must be the case if the selection is made before July 1st, America's chances for winning will be very meagre. They are not very bright under any present possible condition.

The first four on the '99 ranking are Whitman (champion), Davis, Larned and Paret (all-comers winner). Unless Larned, who broke down mid-season last year, should return to his old form and acquire steadiness, there is little hope for us in the singles, for Whitman, Davis or Paret, are not to be classed with R. F. Doherty or Dr. Eaves. Davis and Ward would probably be our doubles pair, and, as we seem usually cleverer in pair work than the English, perhaps there might be a chance for us in this event, although the Doherty brothers, on ranking, quite outclass any pair that we can put against them.

There is talk of the reappearance, in July, of several of the one-time leaders—R. D. Wrenn, O. S. Campbell, E. L. Hall, Malcolm Chace, Carr Neel; and Clarence Hobart has just returned from abroad, where for two years he has been playing. Of them all, past or present, Wrenn is the only one of whose ability (if he re-

turned to form) to defeat the Englishmen I should feel confident.

Triumph of the Native Golfer. The impressive feature of the Metropolitan Championship, decided on the Nassau County links, was the success and the high quality of play of the home-bred golfer; and if, indeed, the younger players are not overhauling the older generation, at the pace it has been claimed they would, it remains a fact, none the less, that the general improvement is marked. The quality of play exhibited over the Nassau course was the more noteworthy because of the rain or high wind which prevailed on several of the days. The week was notable, too, for the evidence it provided of the unrivaled skill of F. S. Douglas at medal play, and his undependableness at match play.

Twice in the week he won the medal play round; in the qualifying round of the championship—making a new 36-hole record of 162, and a new competitive record of 80 for 18 holes—and again in the handicaps, when he turned in 169. But Mr. Douglas was beaten (2 down) in the semi-finals by Allen Kennedy after being 4 up at the 9th hole. Mr. Kennedy, who is a year or so under thirty years of age, has been playing the game only three years, and entirely lacks the free and graceful form of the ideal, such as Mr. Douglas stands for; he uses a three-quarter swing in driving, and rather a pronounced swing in putting, but his style is workmanlike and steady.

The defeat of the title holder, H. M. Harriman, by W. J. Travis, 3 up and 2 to play, cannot be said to have been surprising, for with two men so evenly matched very little would throw the victory either way, and Mr. Travis's steadiness must always give him something of an advantage over any opponent.

Last year Mr. Harriman beat Mr. Travis in the Metropolitan semi-finals by 1 up in nineteen holes; subsequently, at Lakewood, Mr. Travis beat Mr. Harriman by 1 up in twenty holes; and they had not since met until on the Nassau course. The strong wind no doubt somewhat affected Mr. Harriman's game—as he is prone to lift his ball—while Mr. Travis drives his low and with unerring direction. Despite the poor conditions, however, the score for thirty-four holes—Mr. Travis 158, Mr. Harriman 163—in-

dicates the high quality of game they played.

Many Candidates for National Golf Honors.

It is to be hoped that the National Championships at Garden City, beginning the first week in July, will not, this year, include the forty or fifty odd golfers who enter apparently to secure some imaginary honor they seem to think attaches to playing in the tournament, and who have not the smallest chance of getting beyond a good second-class man. Individual clubs, through whom entries are made, could exert such a benign influence in reducing this class of entries, that we trust this year they will realize their duty in the matter. The course is sure to be in fine condition and the sportsmanship of the Garden City club, in taking this tournament a year before they were really prepared to sustain the expense, is to be highly commended. Such support of the National Association, which, by the way, grows steadily in membership and influence, is worthy of remembrance by the Associate and Allied members of the U. S. N. G. A.

Although there are a half-dozen or more likely candidates for national honors—Travis, Harriman, Douglas, Watson, Hollins and Lockwood—yet it seems to me that the championship really rests between Travis and Harriman. If Harriman turns up at his best, I should expect him to win, but his indifference to the value of proper preparation, makes his play uncertain—magnificent and mediocre golf alternating. Mr. Travis is always on his game, is steady, and often brilliant. Douglas, with all his skill, lacks the match-playing quality, and is, therefore, not to be counted upon. Watson has recently been showing very brilliant form, and might beat Douglas, or Harriman, on one of the latter's uneven days; the same may be said of Hollins, Lockwood and Kennedy—but I doubt if any of these can defeat Travis.

There are other players who will stoutly contest the way to the semi-finals—Macdonald, W. B. Smith, Egan, Holabird, Jr., Reid, Jr., Hamilton, Hubbard, Pyne 2nd, Cheney, Stuart, C. Hitchcock, Jr., Shaw, Jr., Toler, Thorp, Brooks, H. Colby, Bohlen, Winston, Tyng and McCauley. It will be instructive to follow the fortunes of these many promising players through the tournament.

Philadelphia's Hackney Renaissance. There is no doubt that the distinct feature of the Philadelphia Open-Air Horse Show was the predominance of the hackney and its crosses. Not only its predominance in many classes, but its success in several. This will be welcome and pleasing news to those whose confidence in the possibilities of this breed has been seriously shaken, of recent years, by its failure to figure more prominently on the prize lists for general harness horses. No single breed has had more money expended on it in the same length of time than the hackney; perhaps none has cost so much; yet until last year there was almost no public evidence of the splendid half-bred heavy-harness animals which were promised as the result of the hackney's importation, and his inter-breeding with native stock.

During nearly a dozen years the hackney's show-ring performances have been devoted to prancing over the tan-bark at the end of a long leading line. In harness, either half or full-breed, with one or two individual exceptions, he has made literally no impression whatever on the judges; indeed, even his temporary retention among the likely few, always picked by the judges in the weeding-out process for further and more deliberate survey, has been so seldom as to create a belief that the hackney-bred stock is out-classed by the trotter or standard bred.

Pleasing as the success in Philadelphia of the half-bred hackney is to the general horse lover, there must, nevertheless, be other and repeated successes before the first impression made by this breed is erased. The first opinion was unbiased and slow in forming, and will be equally as slow in changing. It will take a magnificent type, indeed, to displace the American trotter-bred heavy harness horse from his present pre-eminence.

But there were other features at Philadelphia—which must be regarded as the most important of out-door shows—the saddle class was of especially high quality, and the hunter classes decidedly above those shown in New York last Autumn. On the other hand, the trotter and so-called roadster classes, were unusually small, and not up to the average in quality. The harness classes however were unqualifiedly excellent throughout.

Public Coaching. Considering the incentive of running a public coach to be a desire for sport rather than search of pecuniary gain, all OUTING's readers will be gratified to learn that the seasons of the two coaches running from New York—Pioneer and Good Times—have been very successful. Both were unusually well horsed, and the prices brought by the stock at the close of the season was very satisfactory.

At Philadelphia, Mr. John T. Windrim revived local interest—which has slumbered since Mr. John C. Groome drove Mr. Thomas Wanamaker's Champion to Meadow Brook Farms in '96—by putting on the Rocket from town to Devon Inn.

Coaching is always deserving of encouragement, but when, as was this year the case in Philadelphia, receipts are given to a hospital and the entire expense borne by the generous whip, it must be a phlegmatic lot of people, indeed, who do not respond to such a sporting spirit.

Speed . Law for Automobiles. It is not so long ago that we succeeded in administering a practical quietus to the bicycle "scorcher," after enduring him patiently for several years; and now we seem destined to become victims of the automobile scorcher, unless the civil authorities take immediate steps to check the racing tendency while in its incipient stage. There has been some confusion among metropolitan magistrates as to a law controlling the speed of automobiles; perhaps similar doubt has existed elsewhere in the minds of petty court officials. But it appears extraordinary that any question should arise. The automobile is certainly a vehicle, and whether propelled by steam, or electricity, or gasoline, or air, it is a vehicle, nevertheless, and subject to the laws regulating the speed of vehicles. Such regulations are made to safeguard pedestrians and other carriage traffic, and apply to the speed and not in the character of the conveyance; it matters not whether the vehicle has horses attached behind, or in front, or not at all; it may travel only so fast. Only the tortuous mind of a backwoods' Justice of the Peace could possibly evolve any other interpretation from the simple regulations governing the speed of vehicles.

Of course the automobile must be subject to the same rules as control all other vehicles; and the welfare of the public

is the first to be conserved. There must also be plain rules concerning speed on country highways, otherwise some very serious accidents will result, and the motor machine fall into disgrace—which would be a pity, because, like the telephone, the trolley and the sandwich, it has its uses in this quick-moving, modern life.

National Game Protection. The bill which the Hon. John F. Lacey, of Iowa, successfully championed through Congress, has now become the law of the land. Under this bill interstate traffic in out-of-season birds, which has worked devastation among the upland game of several sections, is prohibited by the United States. The Federal Government, in a word, undertakes to supplement State law by dealing with the shipment in transit. If wardens fulfill their duty, great good must result. Sportsmen should be vigilant and see that the wardens do attend to their duty.

A Deeply Significant Victory. The recent surrender of the Milliners' Protective Association to the Audubon Society is pregnant with significant data, showing how strong is becoming the sentiment for the absolute protection of birds of song and plumage. This Association was formed for the particular purpose of combating the influence of the society, and its offer to agree hereafter to use "only the plumage of domestic fowl, and of game birds killed in season, provided the Society will consent that these feathers and imported feathers may be employed in hat and other decoration," is nothing less than a belated recognition of the force and extent of public opinion.

Whether or no the Society enters into any agreement with the Association matters little. The Association is somewhat like the man who, having fallen out of a balloon, prayed that some modern skyscraping building might kindly intercept his earthward flight ere the final bump left him no voice for protest. It will not be long before women of the right sort will no more purchase a hat decorated with feathers than nowadays they keep one of any description on their heads at the theater. Ill-bred women will keep their hats on in the theater, and women will, no doubt, continue to purchase hats trimmed with feathers so long as they are to be had. For these types of women

corrective influences are necessary; therefore, perhaps, acceptance of the Association's offer might serve a good purpose.

The Legal Way The Best Way. But it would be wise to exact some very definite and fully-indorsed statement from an Association, whose officers have given such recent evidence of equivocation. It is to be remembered that Association officials and their employees published long and emphatic denials—even enlisting the editorial sympathies of one superficial if readable metropolitan morning newspaper—that any but domestic fowl feathers, and those of game birds shot in season, were used for millinery purposes.

There would be more confidence in the well-meaning of the Association if some cessation was apparent in the present slaughter of gulls and terns and others, all along our coast. There is no believing the good intentions of any Association whose actions suggest a willingness to come to terms only when there are no more birds to slaughter.

After all, the most satisfactory way of dealing with this kind of party is by force, rather than by agreement. The best way is to further legislation; making it illegal for women to wear hats trimmed with feathers—apparently the only safe way to deal with such Associations.

Increasing Interest in Forest Preservation. It is exceedingly gratifying to record the sentiment developing in every quarter of the United States for the preservation and the increase of our forests. Much of the effort making is no doubt unlearned; but, at all events, it gives evidence of a receptive spirit, which, in truth, has been long arriving, and is a primal essential to the success of every cause.

With the winning of popular support as its present greatest achievement, the cause of forestry preservation now urgently needs supporters who have at least some practical knowledge on the general subject. Work of permanent value can be accomplished only through the employment of scientific methods. Scientific methods are not possible to the ignorant. Therefore, the great need of forestry preservation to-day is practical instruction.

State Forestry Commissions necessarily employ foresters of whom many lack

sufficient knowledge to fill their posts advantageously. In point of fact, very few men of the requisite knowledge are to be found among the class from which local foresters are drawn, or, indeed, among any other class outside of the forestry schools.

Every State Forestry Commission ought to take upon itself the dissemination of the knowledge needed among its foresters. This could be most simply done through a short series of illustrated and instructive lectures each winter at some central location, where the State foresters could be gathered under the Commission's orders. Furthermore, every State university should include in its curriculum a course of scientific forestry; several already have done so—as for example, Cornell, and the University of Lower California, on the Pacific Coast, where the influence of the Sierra Club is constantly and strongly making for the good cause.

The establishment of a School of Forestry at Yale, as the result of a \$150,000 gift to that university by Mr. and Mrs. J. W. Pinchot, of New York, and their sons, Gifford (Yale '89) and Amos (Yale '98), is further indication of the splendid things being done to help on the national and State work for the preservation of our forests, and for an intelligent understanding of the needs thereof.

What concerns us all most deeply is to keep the administration of our growing forest preserves out of the hands of inexperienced, like mere political appointees. To do this, friends of the cause must have a basis of expert knowledge that will command the respect and the confidence of Congress and of the people; and this basis is to be obtained only through the development of forestry schools, and the active, intelligent co-operation of State Commissions. Clubs and State Commissions and schools may depend upon the earnest co-operation of Gifford Pinchot, the efficient Chief Forester of the United States.

Old World Forest Lessons. The New York *Tribune*, which seems to evince more sympathetic and intelligent interest in such matters than any other of the daily press, printed a most impressive editorial the other day concerning the lessons to be drawn from the absence of forest protection in India, Egypt and Persia.

It is well known that the terrible famine

of India is due to prolonged drouth, but not so many study the matter deeply enough to learn that one of the chief causes of the drouth is the destruction of thousands of square miles of jungle and forest to supply arable land for the increasing population. The Nile is drying up, because at the sources of the mighty river in the remote wildernesses, forest destruction has been unrestricted and enormous. Even in the Congo, where the forest supply seemed inexhaustible, destruction has been of such extent as to make protective measures imperative.

Persia, at one time, was among the most fertile countries of Asia; the great desert of Sahara once supplied Africa and the greater part of Europe with grain. Reckless destruction of forests has lost to the one its well wooded and plentifully-watered lands, and made of the other the vastest desert of the century.

Surely here are object lessons for us! Some of our Western States have before now felt the desolating effects of drouth; some of us know streams where a few years ago we swam, and which we now wade.

The forest is nature's medium of irrigation; we cannot destroy it without surrendering its benefits.

It is the law of nature, and is inexorable.

Better State Game Laws. Although it comes slowly, there is yet no question that great improvement is making in the game laws obtaining in the various States. The changes are not always as radical as some of us would like, nor do they arrive so promptly as most sportsmen desire; but in some improved form they do arrive. Many of the laws, originally unwise, cannot be cut away regardlessly, and must, therefore, be patched up as best they may; in such light must the Raquette River Dam bill in New York State be viewed.

We all wish there could be less recognition of local commercial interests, which in one direction permits of seining during certain months in the Niagara River, and in another allows spring duck shooting.

Still, there is no doubting the new intelligence with which all these matters are being considered, or the steady betterment of the protective laws touching wild animals, birds and fish.

Then, too, the development of the sportsmanly sentiment is made particularly noticeable by the organization, here and there throughout the land, of bands of sportsmen into protective associations; such, for example, as that one formed recently at Princeton, with Prof. William F. Magee as president, and Grover Cleveland, M. Taylor Pyne and Profs. Henry Van Dyke and William Libbey, as vice-presidents.

**Uniform
Laws
Imperative.**

The efforts of protective associations are likely, however, to prove partially unavailing if State legislatures fail to make the open and closed seasons of kindred game uniform. For example, by the new law of New Jersey, woodcock may be killed in October, whereas, under the general law for upland game in that State, no bird shooting is permitted until November. The inevitable result of such non-uniformity in protective laws is, to give opportunities for illegal gunning to the lawless, and additional care to the wardens.

Nothing practical in protection will ever be accomplished so long as such lack of harmony exists in State laws. It ought to be that no man may go legally afield with a gun during the protected season of any upland bird; and the simple form is to make a law of general application.

New Jersey still permits a July woodcock shooting season, which sportsmen are annually opposing with great determination and purpose. The New Jersey Legislature has never been liberal in its appropriation for game protection, but the recent one was economical to the verge of parsimony, and game interests are suffering in consequence.

Ohio has recently become converted to uniformity in game laws, and evolved some very excellent, and, in several instances, unwisely strict legislation. As the State law now stands, except for a wild duck spring season, from March 10th to April 10th, there is but the one open season in the autumn for all game (November 10th to December 1st), while doves and song birds are protected at all times. Like so many reform movements, the one in Ohio for game protection has gone to unnecessary extremes; yet there is so much of sterling good in the new laws that criticism should be tempered by the accomplishments of the legislators. The

all-time protection of song birds and doves, and the single open season for all other birds, are highly commendable; yet the open season might easily be from two to three weeks longer. The spring duck shooting season is directly opposed to the sportsmanly trend of the times, and in strong and unpleasant contrast to the better sentiments suggested by the sponsors of Ohio's new game laws. Some further revision is required, and, I feel confident, will be given.

In Massachusetts an effort is making—and apparently with excellent chances of success—to forbid sale of game at all times; a law, I am inclined to believe, which should become general. Massachusetts, in common with several other near-by States, has, in spring-duck shooting, however, a much less involved and more pressing question that needs legislation.

A law restricting the wild fowl open season to the autumn would be more simple, and at present more satisfying.

Comparatively recent revision of Washington State laws make them now among the wisest and most stringent in the Union.

**Permanent
Protection for
California
Mountain Sheep.** In the April number of *OUTING* appeared a most interesting account by E. E. Bowles of Hunting Big Horn in the Colorado Desert. My respect for game laws, and deep concern in the protection of American game, prompts me, on first receiving the information, to say that it is not now lawful to kill this sheep. The law reads:

"Every person who in the State of California shall at any time hunt, pursue, take, kill or destroy any female deer, or spotted fawn, or any antelope, elk, or mountain sheep, shall be guilty of a misdemeanor."

It is due Mr. Bowles to say that his trip was made, and the description of it written, before this law went into effect.

**Improved
Canadian
Game Laws.** The revised laws of the Canadian provinces are above criticism in all respects save in their differentiation of the opening seasons of upland game birds. In this particular they offend even more than the badly-framed laws of New Jersey. For example, the open season for "grouse, pheasants, prairie fowl or partridge, woodcock, black and gray squirrels, hares and snipe, rail, plover," or

other shore birds, begins September 15th and lasts until December 15; the open season for quail and turkey begins October 15th and lasts until December 15th. This is another case of throwing opportunity at the feet of the lawless, and means that quail and turkey will not be given the protection intended for them, and which they very much need. A general season from October 1st to December 15th would be much more satisfactory.

But, on the whole, the new laws are excellent, and none is more gratifying to sportsmen, or more plainly indicates the spreading sportsmanly sentiment, than that making the only open season for wild fowl—from September 1st to December 15th. It was wise, too, to entirely forbid shooting of wild turkeys, prairie fowl and pheasants until 1905; the first two are so nearly extinct that only a several years' closed season will save them.

Moose, reindeer or caribou can be killed this year only between November 1st and 15th, and between the same dates *every third year hereafter*; another wise bit of protective legislation.

Canada is at last awakening to the needs of the day; hitherto the immediate pecuniary returns, following unchecked invasion of her great natural game preserves, has seemed too tempting to resist.

One very important change which interests anglers, provides that "no speckled trout, bass or muscallonge taken or caught in provincial waters, shall be exposed for sale in, or exported from, the province before July 1, 1903." This is aimed at the market fishermen who have been depleting Canadian waters for the American markets. The lawful two-days' catch of the visiting angler may be taken out of the province by him when leaving.

It is somewhat remarkable that muckerism should continue to obtrude itself upon baseball, despite the uplift-

ing of college athletic morals and the general improvement in the ethics of university sport. It is no less an astonishing than an unpleasant fact. Tricky, dishonest or questionable plays of any character win no games, and they fool no one—not even the umpire. It is surprising the undergraduates themselves do not appreciate the inconsequence of this kind of play, but it is still more surprising that the alumni and the faculty

tolerate it. No university faculty can be using its best efforts for wholesome college sport so long as it permits its baseball nine to indulge in muckerish play. Even in the face of all the well-sounding resolutions put forth over faculty signature, we must doubt the good intention while exhibitions of unsportsmanlike conduct are permitted on the play ground.

Two things are needful to the cleansing of college baseball. First, faculty supervision of a thorough kind, and second, appointment of an umpire whose business it will be to rule on foul play. It would be perfectly practicable for the faculty to pass a rule disqualifying, for that game in which the offense was committed, any player indulging in muckerish ball, with the warning of disqualification for the season, if repeated. There always will be men of unsportsmanly tendencies in every game; it is for these that rules and umpires are necessary, just as it is necessary in the world to make laws to protect the honest from the dishonest.

At present there is absolutely **Wanted—** no penalty for dishonesty in **A Second** baseball. A man may play foul **Umpire.** with impunity. We must place baseball, in this respect, on the same plane as football. Without an umpire, football would become a disgraceful slugging match, and without a second umpire baseball is disgraced by foul and muckerish play. If a few examples were made by faculties the effect would be most wholesome; if, for instance Yale had sent Quinby to the bench for his palpable and repeated blocking of runners at second base, and if Princeton had done likewise with Hutchins, it is not likely the offense would have been repeated. So, too, if the unpleasant and utterly useless badinage, continued throughout the game by the fielders, was *forbidden* by the faculties there would be an end of it.

Harvard has shown what can be done in this direction, because, except for offensive coaching by Loughlin, the Crimson nine's work, this season, has been free of unpleasant and unsportsmanly features.

It is not possible that the Yale and Princeton faculties are powerless; rather they do not seem to appreciate how needful is some very stringent legislation in order to save from disgrace one of the best of college games.

THE AUTOMOBILE.



A Gasoline Type.

THERE is a well-founded conviction that we are already across the frontier line of a new era, in which swift and economical self-propelling vehicles will be one of the every-day accessories of life.

While the management of heavy traffic and the problems of street and road maintenance have, by the advent of the motor, been brought nearer to solution, a valuable addition to our recreations and our travel has rapidly developed.

It is not mere curiosity which prompts the popular eagerness to see, understand and handle automobiles and their associated products. Judgment and vital faith in their future is more often the inspiration.

Present types and models are mainly in the nature of mile-stones along the way to more slightly and far more efficient carriages than any yet produced. Consciousness of this fact has tempered opinion at every exhibition at which they have been displayed, especially during the past twelve months.

Although the exclusive automobile show has not yet taken form in America, there have already been a considerable number both in this and other countries in which the automobile has played a prominent part. In the summer of 1898 there was held in Paris a comprehensive display of the machines then in successful operation in France. The Berlin International Automobile Show, promoted by the Central Europe Automobile Union, and opened in May, 1899, was the most important held in Europe up to that time, and proved to be the forerunner of numerous others. A similar display, though on a lesser scale, followed a month later in London. From midsummer, 1899, un-

til the end of the year, there were, perhaps, a dozen exhibitions of self-propelling vehicles, including a section set apart for that purpose at the National Export Exposition at Philadelphia, Pa., September 14th—November 30th. Before the end of 1900 the exclusive motor vehicle show may be upon us.

THE hydro-carbon and steam motors yield a large harvest of practical machines, showing, on the whole, more variety in outline and construction than those moved by electricity. This tendency is doubtless permanent. One by one the familiar forms of the horse-drawn carriage have been added to this growing family of automobiles, until a surprisingly ample choice is already offered. The use of easily procurable fuels, while attended by some inconvenience, adds greatly to the range of movement, advancing these types to the premier position for all-around use. Prices list from \$600 to \$1,000. Weights vary greatly, with about 700 pounds as an average for road machines.

In the field of electric application the American machines are unequaled. They are exclusive products of our native mechanical genius, and their international supremacy seems reasonably assured. Alcohol and other experimental motive powers are still confined for the most part to foreign use.

THE light run-about is to-day the most commonly seen of all motor vehicles, in electric, hydro-carbon and steam models. In fact, some machines of this nature are listed by all manufacturers catering to current sales. In these is found the minimum of weight with the maximum of speed practicable at this stage of the industry. They are neither for racing nor for burden-carrying, but solely for pleasure transportation, corresponding to the service of the light carriage horse. This type is well suited to afternoon calling, and is the favorite of the professional man intent upon covering as much ground as possible in the least time. As a rule, the accepted lines of the horse-drawn carriage are followed in the make-up of the body of the machine.

The extra light "Park round-about" is seen for the first time this year. In appearance it is frequently more of a quadracycle than a complete vehicle. It is, in fact, borrowed from a style of French construction. The motive power is supplied by a small gasoline motor. Weights have been reduced as low as 300 pounds on machines for one or two persons.

BICYCLING.

AUTOMATIC coaster-brake devices are shown on a fair proportion of the bicycles of 1900, and they are being fitted also to large numbers of machines already in use. That the operation of this latest accessory to the wheel should at first call for considerable care and caution, may seem incredible alike to the novice and the veteran inexperienced in its special control. But that such is the fact is evidenced by a long list of accidents, more or less serious.

The ends sought by the coaster-brake are briefly these: (1) Incorporation with the running gear of adequate means for checking excess speed; (2) the continuance at will, without further effort on the cyclist's part, of any back-peddalling power once applied; (3) release at will of the cranks and pedals from the remainder of the running mechanism, giving a "free" rear wheel, and allowing the rider to rest on favorable grades without cessation of motion. All of these requirements have been more or less successfully met in the equipments now to be had.

It is of first importance to understand that the action of the coaster-brake is not elastic, but positive. On a machine so fitted, back-peddalling, as before known, becomes a lost art; the application of reversed power is continuous until overcome by superior voluntary impulse ahead, no matter whether the feet rest upon the pedals or coasters. The old-time practice of back-peddalling with all one's strength, when in close quarters, meets with swift punishment. During a race among collegians on a New York State track last autumn, the leader's mount was put out of shape, and for the next heat he borrowed a machine fitted with a coaster-brake. Obligated to slow down quickly to prevent collision, he applied the brake with great force, and the wheel stopped so suddenly as to throw him ahead of it on the track. Thousands of lesser mishaps have occurred.

THIS accessory, thoroughly mastered, is one of great possibilities in the way of increased ease and comfort, and entirely devoid of danger. It is, in such case, a valuable addition to the safety of a machine. The point is to apply, at no time, more checking force than you need, and in case of over-estimation to throw it instantly off. Unlearn all that you know about back-peddalling and begin all over again. In so doing, the veriest tyro has an advantage over the proudest veteran.

Cyclists in Ohio are greatly elated over the growing prospects they have for good sidepaths through the eighty-eight counties of the State. The De Ran bill, recently enacted into a law by the Ohio legislature, makes provision for the construction of such paths, through a board of commissioners to be appointed by the probate judge of each county, upon the petition of five resident wheelmen, this board not being empowered to construct the sidepaths, but charged with their maintenance. The law requires the board of each county to build along any public road of the county, outside the limits of incorporated cities and villages or the corporation tax district thereof alone, but prevents construction along any regularly maintained sidewalk, except by the consent of persons owning the abutting lands. The width of the sidepath must be from three to six feet, and it can extend any distance within the boundaries of each section.

SOME form of license, to consist of inscription or emblem, must be displayed in full view on the left side of the front fork, or upon the lower tube of the frame.

A license fee of one dollar must be paid by wheelmen to enjoy the privileges of the use of these smooth country roadways during a calendar year.

Wheelmen residing outside the State may be granted the same advantages upon the payment of a similar license fee in any county where there may be a sidepath board.

The proper protection is afforded, in prohibiting any one from standing or driving any animal on the paths, except for the purpose of crossing. The speed of the "scorcher" is regulated to ten miles per hour when passing another cyclist or a pedestrian. The violation of this act will be considered a misdemeanor, with a punishment inflicted of \$5 to \$25 fine.

Already different county associations have endorsed the new bill and have pledged their assistance, recognizing the increased advantages to the cycling world in Ohio. Of course, in smaller counties the cyclists will be the more ready to act, on account of the taxes being lower in them than in the larger counties and cities. In the latter, it will be much more difficult to collect the fee, as the law prescribes that one need not pay more than a single tax on any one article, and there is in some places now a vehicle tax which includes wheels.

WORLD'S AMATEUR TROTTING RECORDS.

Compiled by Nathan A. Cole.

WORLD'S AMATEUR MATINÉE RECORDS TO WAGON.

<i>Fastest Mile Trotting by a Mare.</i>	
Temper, ch. m., by Elyria, driven by Mr. W. M. Cummer, Cleveland, Ohio, against time; 1899.....	2:09½
Elloree, ch. m., by Axtell, driven by Mr. Calvary Morris, Cleveland, Ohio, in a race; 1897..	2:10
<i>Fastest Mile Trotting by a Stallion.</i>	
Guy, ch. h., by Robert Rysdyk, driven by Mr. J. D. Callery, Pittsburg, Pa., against time; 1899.....	2:10½
<i>Fastest Mile Trotting by a Gelding.</i>	
Cephas, b. g., by Cyril, driven by Mr. W. S. Steele, Cleveland, O.; Sept. 8, 1899.....	2:09¼
Newcastle, b. g., by Cornelian, driven by Mr. H. K. Devereux, Cleveland, Ohio, against time; 1898.....	2:11½
Senator L., b. g., by West Cloud, driven by Mr. John Shepard, Boston, Mass., against time; 1899.....	2:11½
<i>Fastest Two Consecutive Heats in a Race.</i>	
Temper, ch. m., by Elyria, driven by Mr. W. M. Cummer, Cleveland, Ohio; 1899....	2:10¼, 2:11
<i>Fastest Three-Heat Race.</i>	
Faustina, br. m., by Waxford, driven by Mr. H. K. Devereux, Cleveland, Ohio; 1899.....	2:17¾, 2:14, 2:15½
<i>Fastest Four-Heat Race.</i>	
Peko, b. m., by Electioneer, driven by Mr. J. R. Canfield, Cleveland, Ohio; 1898.....	2:15¼, 2:17, 2:18½, 2:17¼
<i>Fastest Five-Heat Race.</i>	
Wilbur, b. g., by Integrity, driven by Mr. J. B. Chapman, Pittsburg, Pa.; 1899.....	2:23, 2:22, 2:22¼, 2:20, 2:22
<i>Fastest Mile by Team.</i>	
Guy, ch. h., by Robert Rysdyk, and Ferris W., ch. m., by Altar, driven by Mr. J. D. Callery, Pittsburg, Pa., against time; 1899.....	2:13½
<i>Fastest Two Consecutive Heats by Team.</i>	
Tomah, ch. g., by Edgardo, and Ackerland, ch. g., by Warlock, driven by Mr. F. G. Hall, Boston, Mass.; 1899.....	2:16, 2:15
<i>Fastest Mile Over Half-Mile Course.</i>	
Wynema, ch. m., by Robert McGregor, driven by Mr. M. E. Loose, Napoleon, Ohio; 1899.	2:13
<i>Fastest Mile Pacing Against Time.</i>	
Sunland Belle, b. m., by Bourbon Wilkes, driven by Mr. H. K. Devereux, Cleveland, Ohio, against time; 1899.....	2:07½
<i>Fastest Mile Pacing in a Race.</i>	
Sunland Belle, b. m., by Bourbon Wilkes, driven by Mr. H. K. Devereux; 1899.....	2:10
<i>Fastest Mile Pacing by a Stallion.</i>	
Pinewood, b. h., by Artemas, driven by Mr. W. B. White, Cleveland, Ohio, against time; 1897.....	2:13½
<i>Fastest Mile Pacing by a Gelding.</i>	
King of Diamonds, by Velocity, driven by owner, Mr. Wm. E. Spratt, St. Joseph, Mo.; 1894.....	2:06½
<i>Fastest Two Consecutive Heats in a Pacing Race.</i>	
Sunland Belle, b. m., by Bourbon Wilkes, driven by Mr. H. K. Devereux, Cleveland, Ohio; 1899.....	2:11¼, 2:10

The official amateur records to wagon (those which have occurred at professional meetings) are as follows :

<i>Fastest Mile Trotting.</i>	
Grace Hastings, b. m., by Bayonne Prince, driven by Mr. N. W. Hubinger, Cleveland, Ohio, against time; 1898.....	2:09½
<i>Fastest Mile by Team. (High Wheel Skeleton Wagon.)</i>	
Belle Hamlin, b. m., and Justina, b. m., by Hamlin's Almont, driven by Mr. C. J. Hamlin, against time; 1890.....	2:13¼
<i>Fastest Mile by Team Over Half-Mile Course.</i>	
Bertie Girl, by Jay Bird, and Lynn Bourbon, by Bourbon Wilkes, driven by Mr. W. H. Morehouse, Toledo, Ohio, against time; 1897.....	2:16¾
<i>Fastest Mile Pacing.</i>	
Bumps, b. h., by Baron Wilkes, driven by Mr. C. G. K. Billings, against time; 1899.....	2:08¼
<i>Fastest Mile Pacing in a Race.</i>	
Arlington, b. g., by Bostick's Almont, driven by Mr. Walter B. Farmer, Providence; 1899..	2:10¾

That a comparison may be made, the world's official professional wagon records are here given :

<i>Fastest Mile Trotting in a Race.</i>	
The Abbot, b. g., by Chimes, driven by Ed. Geers, against time; 1898.....	2:12¼
<i>Fastest Mile in a Race. (High Wheel Skeleton Wagon.)</i>	
Alfred S., b. g., by Elmo, driven by O. A. Hickok; 1890.....	2:16¾
<i>Fastest Mile by Team.</i>	
Belle Hamlin, b. m., by Almont, Jr., and Honest George, b. g., by Albert, driven by Ed. Geers, against time; 1892.....	2:12¼
<i>Fastest Mile by a Team in a Race.</i>	
Sally Simmons, br. m., by Simmons, and Rose Leaf, br. m., by Gold Leaf, driven by Geo. Starr; 1894.....	2:15½
<i>Fastest Mile Pacing.</i>	
Bumps, b. g., by Baron Wilkes, driven by W. L. Snow, against time; 1899.....	2:03¼
<i>Fastest Mile Pacing by a Team.</i>	
John R. Gentry, b. h., by Ashland Wilkes, and Robert J., b. g., by Hartford, driven by E. R. Bowne, against time; 1897.....	2:08

YACHTING.

CORINTHIAN RACING.

THE building of the 70-foot class of the present season in yachting is a step in the right direction. But it does not go far enough. *America's* Cup contests, while they are the finest things we have for the development of the yachting spirit throughout the country, are the worst thing in the world for the encouragement of Corinthian yachting. The huge, hulking monsters of 90-footers, built for the races for the international trophy, are not to be entrusted to the handling of amateurs, however skilful. They are mere racing machines. They are of no use in the world except to race for the Cup, and when they have fulfilled their purpose, they are turned into schooners, because as sloops they are simply monstrosities and unfit for all the ordinary purposes of yachting. Professionalism is forced to its highest pitch in the management of these craft in racing, and yachting is transformed from a gentleman's sport into a sort of business.

With the advent of the 70-footer returns the hope that at least occasionally the owner may take the helm of his own yacht in a race, and that some contests may be arranged with a stipulation that this be done on all the competing vessels. Seventy-footers have been handled successfully by their owners, as the history of the famous races between *Titania* and *Shamrock* will testify. It was on board of his own 70-footer that Oliver Iselin learned all he knows about the management of a big sloop before he undertook the management of the Cup defenders. It was on board of a 65-footer, *Huron*, that W. Butler Duncan gained his experience in the methods of handling big single-stickers.

WHAT, though, has become of the genuine old racing spirit that prevailed in the famous struggles of *Gracie* and *Fanny*, when J. Frederick Tams sailed *Gracie* at times, and other amateurs sailed the other yachts in the same class? There were Corinthians in the crews in those days, too, and they did not ship in order to lie on the overhang and drink beer. We used to have many real Corinthian races in the earlier times of yachting in this port, but the Cup races appear to have killed the spirit. That is why I, for one, am glad to see gentlemen building yachts a size smaller than the big fellows. Perhaps they will come down to a size still smaller in another year, and after a time we may look to see a revival of Corinthian

racing. For genuine Corinthian racing does not consist in merely the steering of the yacht. It embraces also the crew of amateurs, and the training that such crews get is what makes real yachtsmen.

I personally know scores of men who can steer a yacht pretty respectably, but who could not bend on a mainsail nor set a topsail to save their lives. Plenty of yachtsmen can sit at the wheel and give the right orders for raising the anchor, but cannot go forward and direct the operation at the windlass. In my humble opinion, such men are not Corinthian yachtsmen, even if they can get all there is in a yacht out of her when she is close-hauled. Then there are ports in which the humble sand-baggers flourish in large numbers, and men who are expert at jumping from port to starboard and back as the yacht tacks, carrying sand-bags in their wild leaps for fame, are proudly called Corinthian yachtsmen. Sailing catboats is said to be admirable training for young Corinthians, and no one is more willing than I to admit the truth of that assertion; but it seems to me to be just a trifle presumptuous to speak of a man who handles sand-bags as a "Corinthian yachtsman."

A REAL Corinthian crew is able to do all that has to be done in a yacht race, even to taking care of a broken topmast. The true Corinthian sailor can not only steer a yacht, but he can set a jib or a fore-staysail, take in a topsail, and, if need be, turn in a neat splice. A Corinthian crew is a rarity in these days, because the average yachtsman has fallen a prey to the pride of expenditure. Unless everything on the yacht, including the racing crew, costs a mint of money, the yachtsman of to-day is not in the stream of yachting sweldom. It is a pity; for the sailing of one's own yacht, with the help of one's amateur sailor friends, is the finest nautical sport in existence. I have never owned a yacht, but I have been one of the amateur friends, and as the years go by I see that the occupation of my kind is slowly but surely disappearing. That grieves me, and the reader may perceive that this plaint is not entirely unselfish.

To my mind, the Corinthian yachtsman is one who can turn out in the morning and take a look at the sky and the glass, and say: "We shall have the wind out of the nor'west this morning, and that will make it a pretty run to New London." Then he can go below and lay off the course and distance on his chart, mak-

ing the proper allowances for tide and deviation. He can eat a sound breakfast, and then take the quarter-deck with the air of one having authority. He can nominate the canvas the boat is to carry, and he can tell when sheets and halyards are trimmed correctly. He can tell whether she needs a balloon fore-staysail or a working one, and he can judge to a nicety what size jib-topsail she ought to wear. He can get her under way with neatness, and when he has done so he can put her on her course and keep her there. If it comes on to blow, he knows what canvas to take off, and when it is time to clap in a reef. He can put one of his friends at the helm, and superintend the shortening of sail himself. If it turns thick, he can navigate the yacht through the fog, and pick up Bartlett's Reef Lightship as neatly as a blind man's dog picks up a penny. If the end of a line has frayed out, he can put a whipping on it himself; and if he thinks he needs a thimble in an eye-splice, he does not have to go to Phil Low to get it.

That is the kind of a man who is a real Corinthian yachtsman. It is out of such material that our yachting talent must be developed, and such men are not developed out of racing huge single-stickers for international glory. Small yachts are the nurseries of Corinthians, and that is why I, for one, am glad to see the new 70-footers. I wish they were 25 feet shorter, but perhaps good things will come to those who wait.

W. J. HENDERSON.

IN NEW ENGLAND WATERS.

THE Hull-Massachusetts Y. C. have, under the title of "The Hull's Own," adopted the four Hanley boats built for the Y. R. A. cabin 25-foot class, but declared by that Association not conformable to class restriction.

All except prejudiced yachtsmen are convinced that the Association erred in judgment in not making a special class for these boats, though it is equally admitted that the Association was justified in not allowing the boats to enter the class for which they were ostensibly built.

The Association has played into the hands of those of its opponents who have advocated "club individuality" as against Association control.

The "H. O." boats are assured of plenty of racing, and the clubs of the credit therefrom. The neat class insignia of a "H" inclosing an "O" that the *Al Kyris*, *Orphan*, *Hanley* and *Empress* carry in the peak of the mainsail, will be a guarantee of good sport wherever it may be seen.

Opponents of the Association have always claimed that it was attempting more than it could successfully carry out when it undertook to make restrictions for cabin boats. The developments of the past three months have shown this claim to be not without good foundation, for had the Association left the question of restrictions in the cabin classes to associations of owners, as in the case of the successful 21-foot knockabouts and raceabouts, it would not have seen its best cabin class split up, or had the present fight on its hands. The owners would have settled the question of the eligibility of the boats to race in a given class, and the Association would simply have had to control the racing.

Undoubtedly, the Association has done a deal of good for the sport in Massachusetts Bay by securing uniform racing rules, a simple classification, a single entry for a boat for the season's racing, and a schedule of non-conflicting racing dates. It also has infinite possibilities of good work in the future along these and kindred lines.

ANOTHER complaint against the Association is that it has not given sufficient recognition to the individual racing man. It has attempted to meet this by admitting yacht owners to associate membership, with power to vote on the racing rules and on matters affecting their own classes. The racing men, however, have not joined in sufficient numbers to control legislation as to restrictions, and the scheme of associate membership does not seem likely to produce the desired results. Already there is serious talk of the formation of associations of owners to control the restrictions in the cabin classes; and the belief is growing among yachtsmen at large that along this line of individual control of restrictions and club control of the racing through the Association will come a satisfactory solution of the present problem.

It is curious to note in this connection, that the year-book of the Association for 1900 contains diagrams showing just how cabin boats should be measured under the restrictions. These diagrams and the footnotes also accompanying the rules make a misunderstanding impossible. It is a pity that last year's book did not contain them, for then the stable door would have been locked before and not after the horse had been stolen.

Comparisons of the respective abilities of the "H. O." and the regular Y. R. A. classes were hoped for through the offer of the Hull-Massachusetts to start the two classes together in

the races that will be sailed at Hull, and to give a cup for the season's record of the joint sailing, in addition to the cups and cash prizes offered separately in each class; but the refusal of the owners of the Y. R. A. boats to so meet the H. O. class has made close comparison impossible. The Y. R. A. cabin restrictions are, however, really on trial in the races of the regular class, and the season's racing should prove or disprove the value of the sliding scale of ballast, beam and sail that the rules provide. The intent of this scale was to give the keels and centerboards an even chance on the theory that the shallow and beamy boat needed more sail and less ballast than the deep and narrower keel. The theory is a sound one, but the practical application for an even chance is in doubt.

The early races of the season have shown the Crowninshield-designed *Flirt*, an enlarged raceabout, to much better advantage than the centerboard boats. If this superiority is maintained in the subsequent racing, a modification of the restrictions either within or without the Association is inevitable, for the centerboard men will not willingly give up a type that is in many ways more desirable than a keel for Boston Bay sailing.

THOSE yachtsmen who have seen under sail the remodeled *Pompano*, the 21-footer with which W. E. C. Eustis, of the Beverly Yacht Club, has again challenged for the Quincy Cup, believe she will be much faster than last year. The change from a flat-iron-shaped fin keel with her greatest beam of 10 feet at the stern to a centerboard "scow" of an extreme beam of 12 feet 6 inches, has evidently improved both her stability and her speed. It should make the races decidedly more interesting. It certainly was an ingenious idea of her owner to split his boat from stem to stern, to spread out the sides to a width of 6 feet at the bow while keeping them together at the stern, and then to fill in the wedge-shaped space thus left with new frames and planking.

Equally clever was the work of her builder, Howland, of Monument Beach, in making her a stronger and stiffer boat than before.

Full credit is due also the owner for his application of the idea of a centerboard in each bilge, so working together as to have one up when the other is down. Combined with the rudders under each quarter, which are so placed that one is immersed regardless of the boat's angle of heel, and which are worked together by a crossbar connecting the tillers, the devices that made Mr. Eustis's 18-foot *Capelin* a cham-

pionship winner in Buzzard's Bay should insure a good showing for the *Pompano* when she meets *Lookout*, *Tashmoo* and *Hostess* at Quincy, July 16.

W. E. ROBINSON.

ON THE GREAT LAKES.

THE season on the Great Lakes has every prospect of plenty of racing. The interest in the sport is increasing, especially in the small, inexpensive classes.

The Lake Yacht Racing Association of Lake Ontario will, in all probability, schedule their usual circuit for the latter part of July. This circuit embraces Charlotte and Oswego, N. Y.; Toronto, Hamilton, Coburg, and, possibly, Kingston, Ontario.

These Association races have been a feature for some years, and are extremely popular with Lake Ontario men. A circuit pleases every one. The cruiser is sure of good company, and the racing man has an opportunity in every port.

The Interstate Association will hold its annual meet at Put-in-Bay, Lake Erie, probably in August. It is an event always well attended.

The Lake Michigan Yachting Association will not hold an Association regatta this year, but a series of club and open regattas have been announced by the Chicago, Milwaukee, Columbia and Grand Rapids Yacht Clubs.

NOT many large boats have been built in the lake yards, but a number of small craft and two or three restricted 21-foot raceabouts have been built under the new Lake Michigan rules, which are almost identical with those in force in Massachusetts and upon the Sound. The craft are of a type especially well-adapted to our waters.

In Toronto, they have added seven or eight special 16-footers to the fleet, and intend to race them twice a week throughout the season.

J. B. BERRYMAN.

NOTES.

TRUDGING from the vigorous start of yachting on Memorial Day the yachting season should be successful. Corinthians turned out in numbers, and promptly. The mosquito fleet was present in force, and, as small craft constitute the bone and sinew of the sport, the signs are encouraging.

To learn the art of boat-sailing in a dory, a knockabout or a raceabout, and in later life to take up the pursuit of steam yachting when you are less fitted to pull and haul on sheet or halyard, or to take your trick at the tiller, is a proper ambition. Hence the surprising popu-

larity of the single-handed, easily-handled craft, which never before appeared in such numbers on American waters, salt or fresh.

Beginning with the one-design dories, which are admirably adapted for learning the rudimentary principles of sailing, providing you are smart on your pins and can swim well, the choice of a craft is by no means limited. In fact, Corinthian skippers are required to take charge of all boats up to 43ft., racing measurement, and all the clubs, with a few isolated exceptions, realizing the value of young blood, encourage the small fry. So, no matter if from a sailor's point of view the scows, monstrosities and "pig-troughs" that one falls in with occasionally may seem hideous, they are excellent training vessels in which to acquire the cunning arts of the sea-jockey.

The eight new one-design boats of the Marine and Field Club, 25ft. 6in. over all, 17ft. on the water-line, with 7ft. 6in. beam and 4ft. 3in. draught, should furnish some lively contests, while the New York Canoe Club has gone in for a new type of boat in the shape of ten one-design boats 28ft. over all, 18ft. on the water-line, with 8ft. beam and 2ft. 7in. draught. There is nothing of the canoe in these, for their displacement is about 4,000 pounds. They carry 1,350 pounds of outside ballast and 429 square feet of sail. This is mentioned as a sign of the times.

The races of the small craft will be the most interesting of all events in both New York and Eastern waters, and the new raceabouts and knockabouts will attract much attention. The Seawanhaka knockabouts, though staunch and seaworthy little ships, were not altogether satisfactory for racing purposes, though nothing can be said against their cruising qualities.

THE 51-foot class will be livened up considerably by the competition of the three new boats, *Altair*, *Shark* and *Hussar II.*, built specially for cup-winning. The first-named two are keel craft, by Herreshoff, from the same plans, and are owned by Messrs. Cord Meyer, Jr., and F. Lothrop Ames respectively. *Hussar*, a centerboard boat, was designed and built by Webber, of New Rochelle, for Mr. James Baird. She is an improvement on the craft of the same name by the same builder. On her trial trip in the Sound, on May 19, she carried

away her mast. A new one was stepped immediately.

English skippers and sailors have been engaged to man the 70-footers *Mineola* and *Rainbow*, much to the chagrin of busybody patriots. Surely an American yachtsman should be permitted to use his own judgment in an affair of this kind without being hauled over the coals by impertinent outsiders. Next we shall hear of a man being abused as unpatriotic for hiring a French cook, or a Japanese valet. English racing-men do not hesitate to employ American jockeys whenever they feel so disposed, and why should not American yachtsmen avail themselves of the services of British sailing-masters?

To tell the truth, the presence of a smart foreign sea-jockey stirs up a lot of patriotic rivalry among the Yankee skippers, and makes them keep their weather eyes wide open. Never were races more keenly contested than those last year between *Columbia* and *Defender*, one manned by American seamen, the other by Scandinavians. The race war between them had a rare smartening effect, in every way beneficial to the sport.

YACHTSMEN are very eager for the clubs to decide upon a definite system of measurement. The "girth rule," which was heralded with such a flourish of trumpets when it was adopted in America, has been abolished by the Y. R. A. of Long Island Sound. The rule was unsatisfactory in a marked degree. The load water-line length and the sail area are the factors which now obtain in all classes governed by the association.

The Y. R. A. has adopted a plan in vogue in the Massachusetts Y. R. A., which should give a fillip to sport on the Sound. Briefly, the scheme is to award at the close of the season a championship pennant to the yacht in each class in which a Corinthian helmsman is required—that is, 43ft. racing measurement and under. The system of computing points is equitable. In order to prevent professionals from masquerading as amateurs, owners of winning boats are now required to give the names and occupations of the members of their crews as well as the usual declaration that all the rules of the Y. R. A. have been complied with.

A. J. KENEALY.

GOLF.

ALL eyes are now turning toward the Garden City links, on which the National Amateur Championship for 1900 is to be

decided in a few days. Garden City is one of the few clubs in this country which can lay claim to possessing links, in contradistinction

to the scores and scores of golf *courses*; and those who took part in the Metropolitan Championship on these links a little over a year ago will find a material change in the distances of the holes, particularly on the outward journey. The lengthening of the first, third, fourth, fifth, seventh and eighth holes cannot but be considered a very great improvement, and, in conjunction with other changes on the 14th, 15th, 16th, 17th and 18th holes, calls for first-class play befitting the occasion. The changes make the full playing length now 6,070 yards—some 300 or 400 yards more than a year ago.

Despite the increased length and the addition of several new hazards, it will almost assuredly be found that the average scoring will be lower, so much has the general quality of play improved. The alterations in length which have been made now call for one, two or three good shots to reach the green, as the case may be, there being practically no opportunity for the player foozling a stroke to make it up on the next and be on a par with the man who has played each shot cleanly.

Generally speaking, this is true also of the Nassau course, on which the Metropolitan Championship was recently played, and, therefore, some idea may be gained as to the relative standing of the contestants for the leading honor from the Metropolitan district, the majority of whom participated. Apart from these, there are such sterling players as Messrs. Macdonald, Hollins, Pyne, Reid, Stillman and Lynch, of New York; Shaw, Hubbard, Lockwood and Thorp, of Boston; Forrest, Bohlen and Wright, of Philadelphia, and Coates, of Newport, whose claims must be carefully considered, with possibly Holabird, of Chicago, and a few other Western players of some prominence. Taking them as a whole, however, and entirely eliminating the present writer from consideration, I am of the opinion that the winner will be found in this group—Douglas, Harriman, Shaw, Lockwood, Macdonald and Watson.

It will be noticed that with one exception the players mentioned as possibilities are of the "Old Guard." Much has been written and promised concerning the younger players, but so far it must be confessed that they have failed to assert themselves. It is not so much the present generation to which we may look for championship material as it is to those who are now youngsters of from 12 to 15 years of age. In a few years the latter will develop into players combining length, accuracy and steadiness—the steadiness born of playing each stroke mechanically, as it were. In respect to this qual-

ity, the older players seem to possess a marked advantage over the present crop of the younger element, while they can about hold their own on the long game. Whoever the coming champion may be, he certainly will have to get distance through the green on the majority of the holes. Garden City, as it is now, is no place for the pawky player, and furnishes a splendid test of first-class golf.

The indications point to a very large entry list. With a matter of, say, 150 entrants—75 pairs—it will be quite a serious problem to negotiate the qualifying round the first day. Allowing four minutes for headway between each pair, five hours will be consumed before the last couple leave the first tee. Assuming that the first pair leave at 7 a. m., it will be just about noon before the last pair get started. It will occupy about two and one-half hours to negotiate the round, consequently they cannot finish the first 18 holes until about 2:30 p. m., and it will be a little after 5 p. m. before they can possibly commence the second round, finishing approximately at 7:30 p. m. It will probably be found that the estimate of two and one-half hours will be nearer three actually. One or two slow players will affect the whole chain of players following.

THERE are not more than thirty or forty players in the country who may fairly be regarded as standing any chance of reaching the third round, and not more than sixty to ninety of qualifying. Yet, despite a very clear recognition of this fact, many players will enter simply from a remote desire to get into the qualifying class, and many others just for the fun of getting somewhere near. On the basis of 36 holes, sixteen players are amply sufficient to get all the available championship material in. With 18 holes only, it is quite within the realms of possibility for a really good match player to be shut out.

If the good sense of the players generally is appealed to, there will be no trouble in working off the qualifying round in the forthcoming event, or subsequent ones; and for the reputation of their respective clubs it is to be hoped that the secretaries will use a little moral suasion where necessary.

In the Metropolitan district a player's class is pretty well established, and, judging from the recent meeting at Nassau, there is little likelihood of there being an abnormal entry list from this section. There were fifty-two starters for the Metropolitan Championship out of 281 eligibles, comprised of those players with a handicap limit of ten. It is not probable that

this number will be exceeded. With about an equal number from the rest of the country, there will hardly be any fear of the last few pairs finishing by lamplight, as at Morristown in 1898.

WALTER J. TRAVIS.

NOTES.

CONCERNING Vardon, Horace Hutchinson, the well-known English golfing critic, in a letter to the editor, has this to say: "About Vardon in America, one of the most interesting points to us at home is a discovery that you seem to have made about him, that the secret of his power resides in the method of of his grip. It is a quaint grip, fingers of one hands locked over fingers of the other. Curiously, this overlocking is distinctive of the man who has just beaten Vardon for the open championship. And this might seem to amount to something like moral proof that the virtue is in the grip. Yet a further look shows us that it is not quite as it seems at first blush, for whereas both are gallant, good players, their merits are very different.

"Vardon wins by the length and good direction of his long game, by moderate approaching and putting; Taylor by moderate driving, by superlative approaching, and by scarcely moderate putting. Now, if the whole gist of the matter were in the grip, would not the grip give in each case the same result—tremendous driving or tremendous approaching? Instead, we find it giving the one tremendous thing to the one man and the other to the other, so that we are not yet arrived at the secret. Probably there is no secret—no royal road. Vardon has a wonderful sense of timing the stroke—a natural faculty and disposition for the game, developed by success and practice. *Voilà tout!* That is all. But it is a deal."

A VERY great authority on golf, speaking of Douglas, said that although he thought him in a class by himself when playing his best game, he did not consider him a first-class man. Furthermore, that so long as he played for a "hook" on his ball, as he does, he never would be first-class, because in a long match this effort is bound to tell, and directly he begins to tire toward the end he is sure to get all his balls off the nose of the club. The same authority, on being asked his opinion of Harriman, the amateur champion, replied he did not consider him so finished a golfer as Douglas, but, evidently mindful of Harriman's play out of the bunker going to the seventh hole at Atlantic City, added, sententiously, "But he certainly does make most wonderful recoveries."

Commenting on Travis's play the same critic said: "I like his style of playing; he is what I call a hard-working, steady golfer, with a fine nerve, and he will always be there, or thereabouts, in any match."

WHEN asked how he thought the leading ten American amateurs compared with the best on the other side, he placed the best there at one-third better than any one over here, more on account of their steadiness than for any other reason. He added, however, that some of the youngsters here have a style which is simply perfection, and that their play is fully up to the standard of golfers of the same age and experience on the other side.

One good result of Vardon's match play over our courses has been to arouse club committees to an appreciation of the fact that local rules are not golf.

Almost invariably, he insisted that the referee announce before the beginning of play that "the only rules of golf as laid down by the U. S. G. A. are that there are 'no local rules,' the ball must be played where it lies or the hole given up."

Anything more patience-trying than some of the local rules cannot be imagined. They seem made for the express purpose of putting a premium on bad play and punishing first-class golf, and usually are framed to meet the individual eccentricities of one or two of the club's own players. This is a matter which committees ought to think about very seriously.

THE length of the course and the placing of the bunkers are two other matters to which committees should seriously address themselves.

Now, it is not necessarily the length of the course which ought to be considered, although a good playing length is most desirable; it is the placing of the hazards and the distances between tee and green that distinguish the good from the poor course. Every hole should be laid out with the idea that first-class play will enable you to make the hole in a given number of strokes. A three hole should be a three hole and a four hole a four hole, and so on. Hazards and distances should not be placed so that it becomes merely a question of whether the good player makes his approach with his mashie, the second-rate player with his iron, the third-rate with his club, and the man who has fozzled his drive can immediately put himself on an equality with the good player by taking his brassie and reaching the green in the same number of strokes.

THE THOROUGHBRED.

VIEWING the turf from an international standpoint, the most interesting and important feature of 1900 is the introduction of the starting machine upon the race-courses of England. While employed systematically in Australia for several years, the "gate's" previous appearances in England have been very infrequent and of only an experimental nature.

The results of its systematic use for the English two-year-old races of 1900 have been so satisfactory, however, especially in the matter of obviating delays at the post, that the managers of several race-courses are openly favoring its early adoption for all races. Indeed, the Epsom executive early gave notice of the erection of a machine at the five-furlong starting point, "to be used at the discretion of the starter for any five-furlong races in which unnecessary delay is caused at the post."

The starts with the gate in England are effected upon the genuine Australian plan with absolutely no recall, and to this fact, added to the enforcement of thorough discipline over the jockeys, is doubtless due the comparatively assured success of the new style of starting in England.

In this country the matter has not been handled as ably. While the English experimented with a number of gates and limited their final approval to only the very best, the American race-courses have for years witnessed the employment of some very unsatisfactory barriers. Then, too, the English allowed the Carandini gate a career of only three or four days, when, having on several occasions failed to fly up properly on being released, it was virtually barred by an official edict. In America, our gates frequently fail to operate properly, and yet are allowed to remain in permanent use, to the great dissatisfaction of horsemen and public alike, as well as to the endangerment of the lives and limbs of both horses and jockeys.

IN the very first English race in which the gate was this year employed, the starter put a prompt and effectual quietus upon the attempts of some jockeys to draw their horses back from the barrier and get a running start, whereas these tactics are daily employed by one or another of fully a majority of our American jockeys. Starting with the gate means nothing more nor less than "toeing a line," and no other tactics should be for one moment permitted.

It would hardly be correct, however, to give the impression that the gate is universally sat-

isfactory in England, for it would certainly be the inauguration of the millennium were every one suited with it—or with anything else, for that matter. Its success must nevertheless be recorded as considerably more thorough there than in America, and the main reasons for this would appear to be those stated above. Whether or no this "barrier" method of starting race-horses is calculated to inure to the benefit of the thoroughbred is open to genuine question, however, and this branch of the starting problem will receive consideration in these columns at no distant date.

THE list of winning American stallions for 1899 was led by imp. Albert (son of Albert Victor and Hawthorn Bloom, by Kettledrum) with \$97,061, earned by twenty-four representatives, of whom the two-year-olds were remarkably successful, earning no less than \$85,620 of their sire's handsome total. It was therefore exceedingly appropriate, not to say corroborative, that one of this year's two-year-old sons of Albert should have won the National Stallion Race of 1900 at the late Morris Park meeting. The colt in question, Bonnibert, is owned by the sons of the late Mr. Charles Fleischmann, who sold virtually all of their senior horses early last fall, and began the present season with a stable exclusively composed of two-year-olds. Having in these early weeks furnished such winners as Bonnibert, Irritable and Blues, the "blue, red and white sash, white sleeves and cap" bids fair to rival in 1900 the record made in 1889 by the "white, orange sleeves and cap" of the late Hon. W. L. Scott, whose stable, also confined to two-year-olds, won in that season the handsome total of \$101,815.

The Fleischmann two-year-olds in training number fourteen, of which a majority were purchased at public auction as yearlings in 1899. Their owners' recent purchases of breeding stock, however, indicate their intention to pay more attention in future to this very pleasant and eminently sportsmanlike side of turf activity.

HON. W. C. WHITNEY, who has gone into racing with great enthusiasm, began with some fifty-five horses in active training for the American season of 1900, while his "light blue, brown cap" is represented by some twelve or fifteen horses in England. The American candidates are divided between Trainers S. C. Hildreth, Thomas Welsh and Peter Wimmer, while the English contingent are located with

J. H. Clarkson, at Pimperne, Dorset. Mr. Whitney's latest purchase, the \$20,000 Kilmarnock, remains in charge of the colt's late owner, Mr. J. E. Madden. Mr. Whitney's beneficial influence upon the American turf in these late years has been nothing short of incalculable. His liberal purchases and the strength of his name and position have alike been of the greatest benefit to both the racing and breeding branches of the industry; and it is one of the most important and welcome features of the season of 1900 that the representatives of the "light blue, brown cap" are now running in Mr. Whitney's own name.

THERE is a world of sentiment, to say nothing of the abundance of practical considerations, in the announcement that Mr. J. H. Musker, the well-known English breeder and turfman, has sold his two-year-old colt by Melton out of Minera to Mr. R. S. Sievier for a sum which was "over £10,000, but less than £11,000." When all England was rushing after the Australian sons of Musket a few years ago, Mr. Musker quietly negotiated for the re-purchase of the Stockwell-line stallion Melton from Italy; and so cleverly did he operate that the Derby hero of 1885 was actually located at the Westerham Stud before Mr. Musker's countrymen had even an inkling of the matter. That was in 1896, and now the first of the newer generation of English-foaled Meltons have simply carried things by storm, no less than six having won two-year-old stake events during the early weeks of the present season. The above-mentioned sentimental as well as practical feature of the sale of the Minera colt (since named Toddington) is to be found in the fact that the "over £10,000 but less than £11,000" phrase is identical with that which was employed to denote the equivalent given by Mr. Musker for Melton in 1896.

THE great English-bred four-year-old Flying Fox, who realized the unprecedented sum of 37,500 guineas at public auction in March last, has entered stud life at the Jardy Stud in France, where his new owner, M. Edmond Blanc, has a splendid collection of some seventy or eighty brood-mares. The magnificent son of Orme was first mated with Princess Royal, a daughter of Wellingtonia. Only ten mares are on his list for 1900, however, and M. Caillut's Roxelane, by War Dance, enjoys the distinction of being the only visiting matron. It is noteworthy that M. Blanc had no difficulty whatever in filling Flying Fox's book for 1901, ten outside mares at 400 guineas each, although this is a record price for the services

of an untried stallion. Among the mares for 1901 is Roxelane, who is also booked for a third consecutive season in 1902. M. Blanc's quota of his own mares for Flying Fox in 1901 will be thirty, and of these a majority will doubtless be of the Flying Dutchman blood, for which Flying Fox's pedigree betrays an obvious suitability, and of which there is so marked a strength in France. Were one asked to name an almost ideal mating for Flying Fox, however, the answer would inevitably be "Musket mares," by which vague term are designated the present generation of mares by sons of the great Australian hero. Flying Fox is not only by Orme (a son of Angelica, sister to St. Simon), but his dam, Vampire, has a close doubling of the identical Blacklock male line from which comes Galopin, Angelica's sire. When, therefore, we reflect upon St. Simon's success with the blood of Toxopholite (sire of Musket), and upon the phenomenal successes of the young sons of St. Simon with the "Musket mares" in Australia, the suitability of Flying Fox for this strain becomes all the more unmistakable. It would probably be greatly to M. Blanc's advantage in the long run were he to secure some mares of this blood for the express purpose of mating with his new champion, although one can hardly blame him for first relying upon the present members of his splendid establishment.

THE outcome of the recent "special" between Ethelbert and Jean Beraud, at the race-course of the Brooklyn Jockey Club, left small room for doubt that Hon. Perry Belmont's horse is the champion four-year-old racer of America. Such a triumph as Ethelbert achieved on that occasion appeared too unequivocal to be reversed, and the weight of evidence and opinion—at the time of writing—tends to the belief that, despite a possible chance to improve more or less over his form in that race, Jean Beraud's showing in the great struggle indicated his inferiority to Ethelbert in their maturer form, however cleverly the result was reversed when they met as two-year-olds.

Ethelbert is no stranger to the winning post, and his name is one of the most worthy on the list of our Realization winners. His pedigree has, therefore, been under discussion in our turf literature at previous periods in recent history, but it may be doubted if the general run of American race-goers and lovers of the thoroughbred appreciate how really well-bred Mr. Belmont's great horse is.

W. H. ROWE.

ANGLING.

NOTES ON JULY ANGLING.

TO anglers living east of the Rocky Mountains and north of the latitude of Virginia, the month of July ushers in enjoyable days for angling upon mountain streams and lakes. Many are the waters and numerous the species of fish that now await the fisherman's lures, be they of living or dead things, or so fashioned as to look like nothing existent in the air, on land or in the water, for, strange to say, these nondescripts are often the most killing.

July is the month when the brook trout (red-spotted and native) are at their best. The ice water has all run out of the streams; insect life is now appearing within and over the waters and falling from overhanging alders; an occasional thunderstorm fills the banks, surface food is drifting down the current, and the trout, but now thoroughly recovered from their ice-bound hibernations, are on the forage for their daily bread, alert, keen-sighted and rampant in dashes and leaps, a fit fighter each on a four-ounce rod and gossamer leader.

TROUT are, I think, by far more game in the month of July than at any other season. In April and May the spring brooks still retain a remnant of their wintry character, and this, I think, affects the trout very much as a damp, chilly day does a man; he does not feel the atmospheric cold, but is chilled to the bone. I have taken a trout on a mild spring day in April, and as I lifted it from the water it was lifeless as a winter leaf, and gave neither a flap of the tail nor an upheaval of the gill cover.

The angling tourist in July will frequently meet with rainbow trout that have been planted in the waters east of the Rocky Mountains. This fish is the most game of all the trout family, frequently leaping from the water when hooked, and showing superior vigor of dash and resistance. It is fished for with the same lures as are used for the red-spotted fish, but has no objection to the coarsest of natural baits, provided they are fresh when offered.

On the Pacific coast the rainbows are found in their prime in many waters, notably the St. Cloud River in California and the Willamette in Oregon, and in the latter the fish run very large and are fierce, acrobatic fighters. In the St. Cloud River, from whence our Eastern stock was taken, the rainbow is only of moderate size and does not equal the planted Eastern fish in game qualities, which are very prominent in this fish when found in the Au Sable Rivers

of Michigan and New York. The angler who seeks the rainbow will require only the regular stock of standard flies in his book.

WE have with us an imported trout known as the German or brown trout, over which "much to do" has been made, I think, without good angling reasons for it. It is known as "the Dutchman" in some sections, and because of its rapid growth and large size, is much sought by those who want big fish on strong hand-over-hand haul-in tackle. It is the trout of Izaak Walton's laudation. The brown trout can be taken with any of the standard trout flies, and is found in many waters east of the Mississippi, notably the Beaverkill in Sullivan County, N. Y., where it grows to a large size. It is in its prime in the month of July.

July is a fair month for grayling fishing, although, being a spring spawner, the grayling is in its best condition later in the season. This fish is rapidly disappearing, and our fish culturists have not discovered, as yet, the proper method of hatching them artificially. There is no difficulty in fertilizing the ova, but the young fish die very early.

WHILE the grayling of Michigan is disappearing, apparently being destroyed by the trout, those of Montana waters do not seem to be affected by the same cause, as they live and thrive in streams swarming with the black-spotted trout (*Salmo Clarkii*) and the Rocky Mountain whitefish. During an outing in 1896 I fished the Gallatin River, Montana, and took with a fly 125 grayling, whitefish and trout, and did not cover a stretch of water more than fifty feet in length. Frequently I caught on the one and the same cast, a trout, a grayling and a whitefish. Needless to say, our big score was one of record only, and the pan cooked but few of the catch, the balance going their way rejoicing through the pools.

A few grayling can yet be caught in the Au Sable River above the town of Grayling, Mich., and in the Manistee River on the western side of the State and in a few other waters, but not many years will pass before the Michigan grayling will become extinct.

The Montana grayling is a tougher fish, and can be found in its greatest vigor in the Madison, Jefferson and Gallatin Rivers of Montana. The best locality, I think, is about fifteen miles above the junction of these three rivers, which form the head waters of the Missouri.

The Alaskan or Back's grayling has doubtless given many a meal to the gold-seekers in

the territory of Alaska. This grayling is typical of the species, the dorsal fin being resplendent in colorations of great height and extending beyond the adipose or fatty fin. So strikingly beautiful is this standard or banner, that the specific name of *Signifer* (standard bearer) has been given to the fish when taken from some waters. The grayling is caught on standard trout flies, dressed on Nos. 10 and 12 sproat hooks. I had a faint conviction (if any at all) that this fish preferred the Beaver-kill fly, the body wound with silver tinsel, when properly offered to it.

AROUND Prince Edward Island, in the affluence of the Bay Chaleurs, the bays of the eastern coast of Nova Scotia and a few other localities, the sea trout commence to run in June—July, however, being the best time to lure them. These fish run from one pound to six, and fight fiercely. The standard salmon flies dressed on Nos. 4 to 8 hooks, or, as they are sometimes called, "large trout flies," are the proper feathers for them. At times, particularly in Bay Chaleurs, they literally swarm, and give great sport. In the fresh waters of Newfoundland they appear about the middle of July, and are found in great numbers.

The fishing for the so-called golden trout of Sunapee Lake is in season during July. This fish must not be confused with the typical golden trout of the Mount Whitney region, California, the aqua-bonita rainbow beauty of the Sierras. The former is a charr and the latter a pure salmon trout; the one a semi-golden trout of great size, the other a small, slender, gracefully-formed fish, wearing always an overcoat of bright orange-gold coloration. Both fish, however, take the same feathers, the dressings of which must be varied in size to suit the bulk of either fish.

July is the month when that tiger of the waters, the black bass, takes the artificial fly most greedily. Volumes have been written on the habits, qualities, idiosyncrasies and habitat of the black bass, but they can be summed up in the terse phrase of Doctor Henshall—"inch for inch, pound for pound, the gamest fish that swims."

The black bass gives the greater sport when fished for in running waters with the artificial fly, seldom, if, ever, being found in the rapids, but often in the eddies at their edges. In stream fishing, flies tied on No. 4 sproat hooks, in sober colors, notably brown turkey feathers, seem to be the most killing, but this fish will not halt at rising in proper condition of the water to flies of all tints and dressings. In

fact, I usually take the first fly that comes to hand, particularly if I intend to fish the foot of a rapid, where the water is circling in little eddies before subsiding into the pool.

THE cream of the Canadian fishing will be found in New Brunswick; along the north shore of the St. Lawrence, north of Quebec city, so far as and including the great feeders of Lake St. John, and along the marvelous north shore of Lake Superior. Greatest, perhaps, of all these Superior streams is, of course, the celebrated Nepigon, but it has many rivals. The country for miles east of it is traversed by rapid streams too numerous for present mention, and every one of these is a trout-water. Time is, of course, required for a visit to these regions, but even should the trip be deferred until the heated term, it should be richly rewarded. Three and four-pound fish are quite common in all of these remoter streams, while a pound or so heavier is always among the probabilities.

Apropos of these extensive Canadian fishing waters, it is interesting to note the progress of a great protective movement, such as that just taking form under the name of The Roberval Fish and Game Association, with that thorough sportsman, Lord Minto, the Governor-General of Canada, as its chief sponsor. This Association, through the purchase of the vast fish and game concessions of Mr. H. J. Beemer in the Lake St. John region of Quebec, has come into control of about thirty thousand square miles of hunting and fishing territory, and has begun a systematic and scientific plan of stocking its waters with salmon and other fish. Lord Minto has suggested that the preservation of the forests be also undertaken by the Association, and very likely this will be done.

With such beneficent purposes as fish, game and forest protection added to its remarkable natural advantages, it is not surprising to hear that much interest is being taken in the Association among sportsmen both in this country and Canada. In point of fact, sportsmen are beginning to realize that the salvation of game in and out of the water rests with these preserves.

WHEN THE FLY FAILS.

ALTHOUGH fly-fishing is the true angler's delight, there are conditions when one is compelled to fall back upon the bait. It may be that the natural flies are so abundant that the fish cannot be tempted; or it is too hot; or the melting snows have unduly chilled the water;

or there are mutterings of thunder, or some other conditions when the fly is not efficacious; and a few words of advice on the subject of bait may not be out of place.

The most reliable of baits for all-round use is a plump angleworm. There is a variety of worm, which may be found by the hundred in the vicinity of stables and in old manure-piles. It is yellowish below, and is marked in alternating red and yellow rings; its odor is very offensive. Avoid this worm. Some people use it, but I have yet to take a good fish with it. The chief reason for mentioning it at all is that a party may be paid to dig worms, and as this useless worm is the easiest to obtain, it is mighty apt to be offered. The proper worm is the common garden worm, which is plentiful in rich, damp soil. Secure a generous supply—a quart will be none too many for a good day. Have them dug the evening before the start, and keep the main supply in an old bucket or box. Put in a few handfuls of moist earth, then the worms, and cover with plenty more earth, and the worms will keep in fine condition. Fill the small bait-box from the larger, as desired. Other reliable baits include natural insects—grasshoppers, flies, etc.; white grubs, found in rotten logs; larvæ of bees and wasps; the eyes and belly-fins of trout; maggots, crickets, and fragments of cooked or raw meat.

ON RAPID WATERS.

IN bait fishing in rapid water, I always prefer to work down-stream. The trout lie with their heads up-stream, eagerly watching for what the water may bring, and a bait moving with the current looks natural, and, in addition, keeps the line taut and ready for instant action. A trout seldom hesitates over a bait, but either ignores it altogether or lays hold with a vim; hence one cannot well strike too soon after a nibble is felt. In case the sun casts too pronounced a shadow ahead when working directly down-stream, move along whichever bank will enable you to work across and down-stream. This, usually, can be easily managed.

Do not be grudging over the quantity of worms put upon the hook. Have a few loops, and an end or two, free to wriggle, and so increase the attractiveness of the morsel.

Always approach a stream quietly, and, when possible, in the shelter of shrubs, or other cover. You cannot be too cautious, especially when the stream has run low and is very clear. Trout are wary customers, in spite of the headlong dash of their attack upon the bait. Where

the stream runs through the open, as across a meadow, increased caution is absolutely necessary. This may appear to a novice like absurd overcaution, but it is not, as veteran anglers can attest. When wading the stream, move slowly and as silently as possible, and carefully avoid all violent and unnecessary action of the arms. Take your time, and thoroughly try every likely-looking spot before moving on. If, after taking, or pricking and losing a fish, you have reason to believe that others are near by, sit down for a smoke for ten or fifteen minutes, and give the fish time to recover from the alarm sure to be caused by the struggle of the captive.

SOME DON'TS.

DON'T run away with the idea, because you don't at once get a bite, that there are no fish in the stream. Keep quiet, and try under the banks, and near large boulders, driftwood, and the like. Don't knock stones about with your feet when wading; such sounds carry far in the water and alarm fish. Don't handle a rod as if it were a club and you had a personal grievance against the stream. Don't try to jerk the heads off your fish, and don't hoist them into the branches above you. Don't mind the troublesome insects. They will attend strictly to business. Don't act generally as if you knew there was a fool at the butt of the rod and you wanted another fool at the tip. And, above all, don't keep feeling for your flask! Spiritual consolation is a good thing, but leave the bulk of your reformation to the sermon of streams and stones. It is well preached by our best trout waters.

And lastly—and this is very important—don't try to measure your enjoyment by the tally of the fish killed. Such a proceeding will surely stamp you as a mere imitation of a genuine fisherman. Never fish merely for the sake of killing, and never kill a fish for which you do not expect to find a proper use. Unreasonable slaughter is something which a true sportsman abhors, and the moment a gentlemanly sport is dragged down to the level of mere butchery it ceases to be worthy the attention of intelligent people. Before speaking of your success, first wash your mouth with some reliable astringent, so as to talk small. A well-known authority long ago remarked that "All men are liars." As exceptions prove the rule, do your best to be an exception. The man of old knew whereof he spoke—he was something of a fisherman himself—he *knew*!

PHOTOGRAPHY FOR SPORTSMEN.

A NEW TELE-PHOTOGRAPHIC LENS ATTACHMENT
FOR USE AFIELD.

EXCELLENT in almost every respect are nearly all the better class of hand and other small cameras, they have one fault in common: their lenses are of too short focus, and this results in a violent or exaggerated perspective, frequently spoken of as "photographic" by those who do not know that it is due to the abuse, rather than the proper use of the lens. In the May "Review," in the notice of the tele-photo lens, I pointed out how exaggerated perspective could be avoided, but at the cost of a considerable increase in the exposure and other inconveniences. This in turn has been overcome. Photographers will welcome the advent of a new attachment just patented, of which the patentee says: "The object in particular is to assist the user of the hand camera and the smaller sizes of cameras to avoid exaggerated perspective, by enabling the operator to be at a greater distance from the foreground of his subject and yet maintain a sufficiently large image; also to obtain enlarged details in objects included in the ordinary lens, and that without increase in the exposure."

The new tele-photo attachment consists of two lenses, a positive or converging, and a negative or diverging, fitted each into an end of a sliding tube, and placed in front of the ordinary lens instead of behind, as in the older arrangement. Made to screw into the lens in place of the hood, the tele-photo attachment may be put on and off almost as easy as the cap; and while it may be made to do all that could be done by the original form, it will do some things that that could not do.

WHEN the lenses of the new tele-photo attachment are at their normal distance apart, that is, at a distance equal to the difference of their focal lengths, parallel rays falling on the outer, the converging lens, reach the inner, the diverging lens, in a condensed form, and are transmitted parallel to the ordinary lens. If this has been focussed for parallel rays, or if the camera be of the so-called "fixed-focus" variety, the image will be formed at its focal plane, just where it would have been without the tele attachment, but considerably magnified.

Closer together, the system becomes one of varying focal length and varying magnifying power, but the focus will always be beyond the focal plane of the ordinary lens, and the possible degree of magnification

will depend on the distance beyond that to which the camera can be drawn. Separated beyond the normal, the focus will come within the distance of the focal plane with consequent reduction of the image, although objects near enough to the outer or convergent element to be transmitted parallel to the ordinary lens will be enlarged and come to a focus at its focal plane.

It will thus be seen that while the new tele-photo lens is a decided improvement on the older form, and of considerable interest to photographers generally, it should be especially interesting to those who carry the camera along with the rod and gun, or to whom reduction of both bulk and weight is an object, as it will enable them to get, with such cameras as they are able to carry, results as perfect as with larger instruments and lenses of longer focus.

PHOTOGRAPHING AT THE PARIS EXPOSITION.

As is now well known, while a fee of twenty-five francs per day is required to be paid by those who wish to employ at the Paris Exposition a camera on a stand or other support, and that only from the opening hour till an hour after noon, the hand camera may be employed without let or hindrance all the day, without payment other than the ordinary admission fee.

The hand camera is rather an indefinite term, at least so thought the editor of the *Photo-Gazette*, and he applied to the General Commissioner of the Exposition for further information, with a result that is both satisfactory and surprising. On the authority of Monsieur Chardon, the general secretary, the restriction is to be interpreted "absolutely literally." Any camera, whatever be its size or shape, if placed on a tripod or other support, entails the payment of twenty-five francs per day; while, on the other hand, any apparatus, from the smallest pocket camera to 10x12, or any other size, so long as it is held in the hand, will be considered a hand camera and allowed to be used without charge.

Readers of OUTING who take their cameras to the Paris Exposition will find that there, as well as here, the bane of hand-camera work is under-exposure, and that notwithstanding what the platemaker has done for them, if they have nothing more rapid than a "Rapid rectilinear" working at f-8, they will have cause to mourn over many a failure. Those who can afford it, then, will do well to furnish their cameras with one or other of the modern lenses working at f-6, or, better still, f-5.

DR. JOHN NICOL.

UNDERGRADUATE ATHLETICS.

YALE'S REMODELED STROKE.

THE careful, intelligent coaching the Yale crew has received at the hands of Doctor Gallaudet and Captain Allen this year has borne good fruit, and there can be little doubt that the rowing is an improvement on that of a year ago. The men are better grounded in the elements of their work and have gradually been brought up to racing form by steady progress and with a definite end in view.

The uncertainty that characterized last year's work has been largely eliminated, and as a result the individual rowing is better, and the oarsmen themselves have a confidence that they then lacked.

Early in their training they mastered the art of balancing the shell and running it on an even keel, so that practice rows became a pleasure instead of a drudge, as they were many times during the spring of '99, when a steady boat was almost a rarity. The candidates, too, have shown a willingness to learn and to do hard, uncompromising work, particularly during the past two months, that was not so prominent in Allen's first crew.

All these features have tended to make the developing of the present New Haven crew more sure and more satisfactory, and there exists a strong hope that the rather unsettled state of affairs of recent years has been eliminated. These encouraging features, however, cannot be taken to mean that Yale men are satisfied or over-confident; only that they have made a step in the right direction, and that they hope to profit by that step, whether fortune favors them to the extent of a victory or not.

Two difficulties confront the coaches who are endeavoring to lead Yale back to the system which was successfully in vogue there for ten years. The first of these is a rustiness in the coaches themselves from lack of recent contact with rowing and coaching, and the second is the eradicating of habits which the present oarsmen had contracted under the influence of the Henley experience. The latter has proved the real stumbling block, and has not been surmounted.

THE coaching until the first of May was left almost entirely in the hands of Gallaudet and Allen, owing to the impossibility of other coaches being in New Haven during the winter months. The rowing and teaching of these two had been so much identified with the newer methods that they unconsciously worked into

their instruction ideas that were fundamentally at variance with the older method, and had their pupils thoroughly grounded in them before the difference was discovered. The work of the crew up to this point had been in general satisfactory and steadily progressive, and the question of making any alteration in style of rowing was a delicate one.

During the early part of May the older coaches returned to New Haven in numbers and settled down to earnest work in their endeavors to get round the difficulty. The variations in the style in use and the style they desired did not at first seem sufficiently great to prevent a change to the latter, but later they proved to be so.

Captain Allen, with Doctor Gallaudet, felt that there was good reason for the alterations in the experience of many expert oarsmen, and, farther, that this particular crew had advanced too far for any deviation from the policy pursued up to that time. This argument was a strong one, and was permitted to stand by the advocates of the other system; and so, after all, Yale men are not to have the satisfaction of seeing the old and the new opposed at New London, as many of them had hoped.

This arrangement has thrown the brunt of the work on Gallaudet as coach, since there seemed to be no available assistant who felt sufficiently sure of the new ground to come to his aid. He, however, is well drilled in the art of rowing, having had four years' experience in the boat and two years as head coach. He has taken up his task with great seriousness and determination, and has most carefully studied the end to be attained. In addition to this, he is more than liked by his men, and their early training has been on the lines he is now pursuing. Captain Allen and the crew are in thorough accord with him, and will do their share toward lessening the difficulties of the position.

THERE is no sport that presents more uncertainties than rowing when one endeavors to estimate the relative merits of different teams, and so any comparison of what Yale is doing this year with what she did a year ago on the water is at best unsatisfactory. There is a strong feeling among boating men that in '99 the New Haven crew reached its best skill and greatest speed some ten days before the race, and that there was a decided break from this to race day. It seems improbable that such an error can occur again, for the crew themselves

are fully aware of its possibility, and every effort has been made to prevent it.

Since early spring the training has been well and carefully mapped out from week to week, and a too rapid pace has been guarded against by much pair-oar work and a slow stroke, well along into June. The make-up of the crew was also delayed unusually long, and few of the men felt certain of seats up to a late date.

In short, Yale has made a consistent, strong effort to profit by the mistakes of a year ago, and with apparently fair success. That she has been unable to return completely to the style of work that is the idol of many successful Yale oarsmen, may prove to be more of a disappointment to them than a loss to her; for, if the newer method is really better, these same men will be the first to relinquish their ideas and enjoy them only in the memory of what was good until a better was born.

The make-up of the crew, which has long been determined on, includes: Cameron, stroke; Blagdon, No. 7; Captain Allen, No. 6; Cross, No. 5; Brock, No. 4; Niederken, No. 3; Wickes, No. 2; Mitchell, bow. Of these, Nos. 6, 5, 4, 3 and 2 were in last year's 'Varsity. Cameron rowed in the four-oar and Blagdon in the Freshman.

BASEBALL.

THE season's record of baseball at Yale, including the match with Princeton on June 2, gives the annexed table showing runs, hits and errors of Yale and her opponents in twenty-two games, with their summaries:

	R.	H.	E.		R.	H.	E.
Yale.....	20	15	4	N. Y. Univ..	8	6	9
Yale.....	14	13	4	Tufts	3	6	8
Yale.....	12	10	6	Wesleyan ...	10	12	7
Yale.....	10	10	5	Fordham	7	8	2
Yale.....	7	9	4	Georgetown..	4	7	2
Yale.....	10	8	5	Maryland ...	8	13	9
Yale.....	6	10	4	Boston	7	14	0
Yale.....	8	6	0	Virginia	7	8	7
Yale.....	5	8	4	Georgetown..	6	9	2
Yale.....	4	11	6	Holy Cross...	3	8	4
Yale.....	15	14	3	Amherst	6	9	9
Yale.....	2	9	0	Wesleyan ...	0	2	2
Yale.....	5	5	3	Brown	1	5	4
Yale.....	9	7	6	Columbia	4	4	7
Yale.....	6	10	3	Andover	0	3	5
Yale.....	6	15	7	Brown	7	13	2
Yale.....	7	10	1	Lafayette ...	1	5	3
Yale.....	8	6	4	Lehigh	10	14	4
Yale.....	7	8	1	Georgetown..	2	5	4
Yale.....	7	9	5	Crescent	5	10	2
Yale.....	3	6	4	Brown	7	11	5
Yale.....	3	5	6	Princeton ...	9	10	4
Total....	174	204	85		115	182	101

Up to the corresponding period last year, including the Princeton game, Yale in twenty-five matches had scored 225 runs, 234 hits and 98 errors, or approximately 9.4 hits and 4 errors to a game, as compared with 9.3 hits and about 3.9 errors this year. The comparative figures on the basis taken show a slightly bet-

ter record in fielding and a little better in batting than last year, the opposing clubs in each year being almost exactly the same.

DURING what may fitly be called the preliminary period of the present season the Yale nine passed through three stages. In the first stage and during the Eastern trip the nine, as was to be expected, showed, at times, pretty "raw" play. There followed what seemed to be, under the intelligent and earnest management of Captain Camp, an encouraging stage of rounding up into championship form, when both batting and fielding steadily improved. Then came an unlooked-for drop. Captain Camp, with a sprained side, was forced to the bench in two games, Sullivan's right arm failed him, Barnwell, Brown and Quimby fell away in their work, and men, reckoned as substitutes early in the season, had to be put on and considerable training done over again, so far as brief time allowed.

But the persistent and obstinate fault, the deepest problem which the captain of a nine has to front, reappeared this year in weak and desultory batting. In spite of some good and pretty regular performances at the bat by Cook, who rejoined the nine after squaring himself in scholarship, the team, as a whole, remained erratic and feeble hitters, with occasional spurts of brilliancy, as in the Georgetown game, but seldom finding the base hard and consecutively. The record of hits, indeed, up to the end of the Princeton game would show, could it be analyzed, a singularly large proportion of "scratch," "drop" and very short base hits, instead of the hard, swift bat work which has the double merit of bringing in runs and inspiring a college team—always quickly susceptible to stimulus and depression—with confidence.

This negative trait of infirm batting was discouragingly exhibited in the first Princeton game. How and why it has infected Yale baseball teams of the last two years remains a mystery.

It is an experience in which the Yale nine has not, in academic baseball annals, stood alone. Comforting experience also proves that it is subject to abrupt changes.

At the opening of the season it was a fact of expert knowledge that Yale, from her material, could hardly expect to develop batteries of the highest university type, and the results of the preliminary season have neither risen above the forecasts nor fallen below them. But, with the hoped-for strength in batting, the mild defaults in pitching, catching and some of the field play, could have been offset. The brighter

side of the outlook has been the disclosure in the second (college) nine and in the Freshman team of some excellent material, which will be available next year.

HARVARD'S SUCCESSFUL CLUB ROWING SYSTEM.

NOTHING half so serious as the loss of Tilton at No. 4 has happened to the Harvard crew this season, and the extent of that loss will be appreciated more day by day as the date for the race with Yale draws near. If Tilton was in this year's boat, the 1900 crew would, the first week in June, have been fully up to its two weeks later form of last year's crew, with an excellent prospect of surpassing the final standard set in '99. The loss has not been entirely repaired. This does not mean, however, that Harvard will be weak in the waist of the boat, nor does it imply that the integrity of the crew is to be affected by the absence of Tilton; yet there is no doubting the influence his loss has had upon the speed and smooth running of the shell, especially in early June. Nor is it true, either, that Harvard has lacked for excellent substitute material, since the fact is that never has Harvard, and never has any other rowing university in America, had such an abundance of good rowing material as seen at Cambridge this year.

The club system has developed oarsmen by the score, and the feature of the year has been the great number of men who rowed well. Such a revolution as that of 1900 seems incredible to those who remember the old days when the eight to a dozen 'Varsity candidates wended their lonely way to the boat-house every afternoon. This year it has not been a question of seeking oarsmen; rather has it been a question of providing boats for all those who offered themselves at the Weld and the Newell Clubs' floats.

Harvard's 1900 'Varsity is the net result of the rowing and racing of twenty-six eights that from first to last have trained on the Charles River. That five of the chosen crew also sat in last year's boat, indicates the quality of these oarsmen, rather than absence of fresh and first-class material. In reality, Harvard had by the middle of June this year, sixteen men of really 'Varsity timber, and the second crew was very much nearer the first in general form and in speed than has ever been the case in university boating. Herein lies Harvard's great natural advantage over Yale.

As the men rowed just before going to New London, the 'Varsity boat held Captain Higginson, stroke; Sheafe, No. 7; H. Bancroft,

No. 6; Ladd, No. 5; Lawrence, No. 4; Wood, No. 3; Bullard, No. 2, and Biddle, bow. The second crew had G. Bancroft, stroke; Goodell, No. 7; Shuebruk, No. 6; McConnell, No. 5; Henderson, No. 4; Emory, No. 3; Evans, No. 2, and Harding, bow. Of these, Shuebruk, Ladd, Bullard and Goodell rowed on last year's winning Freshmen crew. Biddle was No. 7 on the '98 crew, and Higginson, Sheafe, H. Bancroft, Wood, Lawrence, Evans and Harding were members of the winning 'Varsity of '99.

It is not impossible that in the final shifting Harding may find a place in the boat, but Evans and Lawrence have not equaled their '99 form. The work in the waist of the boat is not altogether satisfactory. It may be that a new man will be seen at No. 4. Shuebruk and Henderson are both very powerful and promising.

The crew gets on its power very sharply this year at the catch, the emphasizing of which in the early part of June made the end of the stroke seem neglected. This, in connection with the eight being a very strong and heavy one, made the work a little rough and sent the boat along less smoothly; faults that undoubtedly will be corrected before the New London race.

BASEBALL.

THE notable feature of this year's 'Varsity nine as compared with others of recent years, was its early season form.

April 7, Boston College, at Cambridge, 8—7. April 11, Tufts, at Cambridge, 5—4. April 14, Univ. of Virginia, at Charlottesville, 7—0. April 27, Dartmouth, at Cambridge, 5—1. April 28, Brown, at Cambridge, 0—3; 10 innings. May 3, Dartmouth, at Hanover, 8—0. May 5, Williams, at Cambridge, 12—0. May 8, Amherst, at Cambridge, 26—5. May 10, Bowdoin, at Cambridge, 7—5. May 12, Columbia, at Cambridge, 19—4. May 16, Lafayette, at Cambridge, 8—2. May 19, Pennsylvania, at Philadelphia, 9—5. May 26, Princeton, at Cambridge, 4—0. May 29, Georgetown, at Cambridge, 2—8. June 2, Brown, at Providence, 2—3.

The batting has been rather above the average, perhaps not so much in the actual number of base hits as in their timeliness. Harvard's strength in the box came as a surprise, and it cannot be denied that the development of such a pitcher as Freshman Stillman reflects great credit upon captain and coaches alike. Indeed, to the coaching and to the skilful work of Captain Reid behind the bat, must be attributed in great measure the showing of this Freshman pitcher.

The cage work, except for the battery candidates, was much less arduous than had been the custom previously, especially in regard to sliding bases. In the past, at least one in-

capacitated promising candidate was the result of injudicious cage work or base sliding. More attention has been given to instruction in batting, fielding, and the correct plays to make under various conditions. The new baseball cage unquestionably aided the early development of the nine. It is of sufficient size to permit the laying out of the home-plate and any other two bases with the correct distances, and, being well-lighted, thus gives good practice in both fielding and batting. With such advantages, the candidates naturally began outdoor work better grounded in the rudiments of baseball than had been the case for some years. The candidates that had come out were carefully sifted and tried, and the cry of favoritism, or poor judgment in regard to the ultimate selection, is yet to be heard at Cambridge this year.

Harvard's base-running particularly has been a great improvement on that of previous years, and the men have played as a unit, with a spirit which is refreshing to see, and that augurs well for the future.

In the early games the in-field showed a somewhat distracting inability to throw hard and accurately, but later in the season this was to a considerable extent overcome.

The batting, as usual, has been the weak spot; but in this respect, as in all others, the team seems to be better than in recent years. Unless improvement is made in this direction, however, the nine will have difficulty in winning the series from Princeton and Yale, for Harvard has been compelled to rely upon her pitchers holding her opponents down, hoping meantime, and somehow, to score enough runs to win. This may be putting it rather strongly, but, none the less, it is true that when Harvard has met really first-class pitchers, as, for example, Hillebrand of Princeton, and Washburn of Brown, the batting has been decidedly weak.

It is impossible to speak of the Harvard ball nine of 1900 without commending the work of Dr. Edward H. Nichols, who for the first time has coached the team. He was graduated from Harvard in '85, and that season had the remarkable record of not losing a single game in which he pitched.

Whether or no Harvard wins the Yale and Princeton series, at least the nine has made a most creditable record in spirit and in play, and for this no stinted praise is due the coaches and Captain Reid.

PENNSYLVANIA BASEBALL.

PENNSYLVANIA'S baseball season has been very successful. Considering the number of

new men, the team has consistently played good ball, despite a tendency to uncertain work at critical moments, as was especially noticeable in the Harvard and Michigan games. Layton has creditably borne the brunt of the pitching, while Leary, who was wild at the beginning of the season, settled down near its close and pitched excellently. Next year he should make a record among college pitchers. The out-field, consisting of Gamthrop, Heuston and White, has done good work all season. Of the in-field men, Collier at second has proved fast and sure, while Jones at first has done acceptable work. As much cannot be said of those who have played at third and short. The real features of this year's team have been its strong batting and excellent base-running.

The team's schedule, which follows, is a very creditable one.

April 4, Fordham, at Fordham, 20—10. April 7, Indians, at Franklin Field, 7—6. April 11, Manhattan, at Franklin Field, 9—9. April 14, Columbia, at Franklin Field, 15—7. April 19, Vermont, at Franklin Field, 17—0. April 21, Lafayette, at Franklin Field, 6—2. April 23, Virginia, at Charlottesville, 8—7. April 24, Virginia, at Charlottesville, 4—19. April 25, Georgetown, at Washington, 3—4. April 28, Annapolis, at Annapolis, 10—5. May 2, Syracuse, at Franklin Field, 16—9. May 5, Cornell, at Franklin Field, 5—6. May 12, Cornell, at Ithaca, 6—4. May 17, Brown, at Franklin Field, 11—2. May 19, Harvard, at Franklin Field, 5—9. May 23, Lafayette, at Easton, 8—7. May 28, Michigan, at Franklin Field, 2—7. May 30, Lehigh, at South Bethlehem, 3—0. June 2, Georgetown, at Franklin Field, 1—1; game stopped in seventh inning by rain.

BOATING.

THE crew prospects are considered very bright. The different crews have shown grand form, and Coach Ward is satisfied with them. The 'Varsity's time, 10 m. 36 sec., in defeating Annapolis over the outside course of two nautical miles, made a new record for that course. The Freshman crew is also a good one. It was defeated one-quarter of a boat length by Annapolis's second crew, but the next week defeated the Junior eight of the Fairmount Boat Club, and on Decoration Day it beat a mixed Pennsylvania crew composed of 'Varsity men and substitutes. On the same day the second crew (with several 'Varsity men in the boat) defeated the second crews of Cornell and Columbia, winning by six lengths from Cornell.

The Pennsylvania crews are looking for a hard and close race, and, after last year's showing, they are more afraid of Wisconsin's crew than of any of the Eastern eights. The victories of the past two seasons have popularized

aquatics at Pennsylvania, so that a share of honors seems assured for the future.

CRICKET.

FOR the first time in several years, Pennsylvania is the Intercollegiate Cricket Champion. This is wholly due to conscientious and persistent practice, to the grand hitting of Jones, the Captain, to the fine bowling of Climenenson and O'Neill, and good all-round play. Climenenson's bowling, in the estimation of several seasoned cricketers, was the best that has been seen in any Intercollegiate match since the days of Patterson, Ralston and Thayer, and quite as good as any done in America last season.

MIDDLE WESTERN UNIVERSITY BASEBALL.

IN spite of the season having brought out but one college team in the Middle West really up to the usual standard, in many ways the year has been distinctly a success: Interest in the game has been above the ordinary, and most of the teams have played long schedules. Moreover, Wisconsin—very backward in this game for several seasons—developed a team which renewed interest at Madison, and so assures good competition in this sport from that quarter in the future.

Illinois, by consistent play and even development, seems entitled to first honors in the Middle West, although a Michigan team has the distinction of breaking even with them. Illinois took four straight games from Chicago and defeated Wisconsin, and played consistent, winning ball throughout the season. It is probably the best team Illinois ever had, and one of the best that ever represented any college in the West. It combines a good out-field, an especially fast in-field, a reliable back-stop and a pitching staff that, for numbers, versatility and strength, perhaps has never been excelled among the colleges.

Michigan, although losing two straight games to Wisconsin, is, perhaps, entitled to the second position by winning half the games with Illinois, taking the Chicago series and defeating Cornell. The Ann Arbor team was a peculiar one this season. The out-field—McGinnis, Snow and Davies—was far above the usual college standard, and one of the best Michigan ever had: while the in-field was one of considerable ability; but the lack of a strong battery made the in-field erratic, and, in consequence, the play of the team was very uncertain. The same men who played excellent ball all through last season have this year shown work generally uneven, and sometimes poor.

Wisconsin, after a very discouraging start, has finished well, and there is no reason why

it should not attain a rank in baseball equal to that held in other branches of sport. This year, by winning two games against Michigan, the nine has reached the fore rank among the Middle Western teams, though defeated by both Illinois and Minnesota and tied with Chicago. With more experience, the team has great possibilities.

Chicago's nine this season was poorer than any Stagg has developed for a number of years; having lost to Illinois and Michigan, and only tied with Wisconsin, it cannot be placed in better than fourth position this season, though it beat Pennsylvania, 10—6. Aside from Merrifield, who played both in the in-field and in the box, and Place, in the out-field, the team included none to rank with the usual maroon players of former years. There are a number of promising new men, however, notably catcher Harper, who may prove of considerable value next season.

MIDDLE WESTERN COLLEGE BASEBALL SCORE.

Date.	Place.	Teams and Scores.
April 16.	Champaign.	Michigan 7—Illinois 3.
" 17.	Chicago.	Northwestern 7—Chicago 6.
" 18.	Madison.	Wisconsin 7—Michigan 1.
" 20.	Evanston.	Michigan 8—Northwestern 3.
" 21.	Champaign.	Illinois 11—Chicago 1.
" 27.	Evanston.	Illinois 4—Northwestern 3.
" 28.	Madison.	Illinois 12—Wisconsin 0.
" 28.	Champaign.	Illinois 12—Chicago 2.
May 3.	Chicago.	Chicago 13—Kansas 7.
" 5.	Chicago.	Illinois 4—Chicago 1.
" 5.	Ann Arbor.	Michigan 26—Northw'n 2.
" 9.	Ann Arbor.	Chicago 9—Michigan 6.
" 11.	Evanston.	Iowa 10—Northwestern 8.
" 12.	Chicago.	Michigan 18—Chicago 11.
" 12.	Madison.	Wisconsin 12—Northw'n 11.
" 14.	Champaign.	Illinois 12—Michigan 6.
" 15.	Champaign.	Michigan 7—Illinois 3.
" 16.	Chicago.	Michigan 11—Chicago 11.
" 16.	Iowa City.	Iowa 11—Minnesota 7.
" 17.	Evanston.	Northw'n 7—Wisconsin 2.
" 19.	Grand Rapids.	Wisconsin 16—Michigan 13.
" 23.	Champaign.	Illinois 9—Chicago 4.
" 22.	Chicago.	Wisconsin 9—Chicago 5.
" 26.	Ithaca.	Michigan 7—Cornell 2.
" 26.	Chicago.	Illinois 10—Chicago 3.
" 26.	Minneapolis.	Minnesota 21—Wisconsin 7.
" 28.	Philadelphia.	Michigan 7—Penna. 2.
" 29.	Madison.	Chicago 5—Wisconsin 2.
" 30.	Detroit.	Illinois 6—Michigan 5.
June 2.	Ann Arbor.	Michigan 3—Chicago 2.
" 2.	Madison.	Minnesota 12—Wisconsin 2.

WESTERN INTERCOLLEGIATE CHAMPIONSHIPS.

IN many respects the track season just closed was perhaps the most successful ever seen in the Middle West. Competition was close and the records comparatively good; best of all, bickering was absent, and a great improvement in ethics noticeable. Burroughs, of Chicago, deserves great credit for refusing to compete in the Intercollegiate Championships, in spite of his college's early announced intention of using him. Chicago's course in barring Lord from the championships (although he was used in

the dual meets) is also to be commended. Another evidence of vigilance along ethical lines was shown by the action of Michigan's Board of Control in forbidding the running of Leiblee, on account of his scholarship.

The intercollegiate championship provided the most evenly matched teams and most closely contested events of any previous meeting. Only two points separated the leading three. Michigan, 31; Chicago, 30½; California, 29. The other colleges scored: Wisconsin, 21; Notre Dame, 17; Northwestern, 6; Knox, 4½; Minnesota, 3; Nebraska, 2.

This is the first championship for Michigan under the present management, and the victory is all the more deserving, considering the sudden withdrawal of Leiblee, as he had been depended on to win both dashes.

Michigan won: 220 hurdles (McLean, 25 3-5s., equaling record); pole vault (Dovrak, 11ft. 6in., breaking record); high jump (Armstrong, 5ft. 10¼in.); second in 120-yard hurdles, broad jump, high jump, discus, half-mile and quarter-mile.

Chicago won: 440 yards (W. A. Moloney, 51 2-5s.); 880 yards (W. A. Moloney, 2:02); 120-yard hurdles (F. A. Moloney, 16 1-5s.); second in mile run, 220-yard hurdles, mile walk, hammer throw, quarter-mile bicycle, and divided third in mile bicycle.

California won: Hammer throw (Plaw, 156ft. 3in.); shot put (Plaw, 41ft. 8in.); 100 yards dash (Cadogan, 10 2-5s.); 220 yards dash (Cadogan, 22 2-5s.); second in hammer throw, 220 yards dash and shot put, and third in broad jump.

Other colleges to win firsts were: Wisconsin, in mile walk (Bredstein, 7:00 record); broad jump (Schule, 21ft. 4½in.); discus (Granke, 110ft. 2in.). Notre Dame, quarter-mile bicycle (Gaffney, 33s.); mile bicycle (Gaffney, 2:53). Northwestern, mile run (Baker, 4:33 2-5 record).

Despite weather not being conducive to record-breaking, there were many notable performances. Dovrak, of Michigan, who as a Freshman has set a new western mark in the pole vault (11ft. 6in.), gives great promise for the future, and has already brought much credit both to himself and to his college. Baker, of Northwestern, without being pushed established a new western record in the mile (4:33½). With training and experience, he should become a great distance runner.

California's close race with the leaders was largely due to circumstances. The withdrawal of Burroughs, of Chicago; Leiblee, of Michigan, and the injury to Corcoran, of Notre Dame, gave the Pacific coast athletes the opportunity of winning 13 points in the sprints.

CALIFORNIA UNIVERSITY ATHLETICS.

THE only athletics worthy of consideration on the Pacific coast, outside of the schools and academies, are the games between Leland Stanford and the University of California.

In tennis, California has some of the best players on the coast, among others Sumner Hardy, Harold Braley and Paul Selby, who.

in a tournament with leading Eastern players last summer at Del Monte, made a very favorable showing. A great deal of attention is given to the sport at the State University, where bituminous courts are building on the campus, which will still further stimulate the highest excellence in play.

THE outlook for football on the Pacific coast will be materially improved if, as the hope is, the University of Oregon and the University of Nevada will develop strong teams. There is a strong movement against the continued employment of Eastern coaches. Probably after next year graduate coaches only will be tolerated. The danger in this move is that the Pacific coast will shut itself off from the standards of play prevailing at the East, otherwise the move will have only healthy results.

The general undergraduate sentiment is strongly averse to any form of professionalism, and the spirit of the players in football shows them appreciative of the ideals of good sport.

The track team has always been the especial pride of the University of California. It has developed a policy of its own, and has traditions of its own to follow. One part of this college tradition is that the track captain is the coach and trainer of his own team. Every man must obey him implicitly, and on him is thrown the duty of regulating each man's work. Strangely enough, this system has seemed to work very well. At any rate, the University of California has been uniformly successful in its track athletics.

This year's team is said to be no better than California has pro-



J. Hoffmann.



Roy Woolsey.



Bakewell. A. Cadogan. C. R. Broughton. A. Walsh.

duced each year since 1895. The fact is, the teams are uniformly good. Some of the records of the men on the 1900 team recently in the East are: Drum, 10 1-5, 23, 51; Cadogan, 23 1-5, 51 1-5, in the sprints and quarter; Bakewell, 15 4-5, 26 2-5 (hurdles); Woolsey, shot, 40 feet; Plaw, shot, 39 feet; hammer, 147 feet; Hoffmann, pole vault, 11 feet; high jump, 5 feet, 11 inches; Broughton, broad jump, 23 feet 4 inches.

IMPORTANT changes are now pending in the athletic management. A constitution which the students have prepared and are proposing to adopt provides that the control of all student athletics shall be in the hands of one com-

mittee of seven, composed as follows: President, vice-president and secretary of the Associated Students, a student at large from the senior class, an alumnus, a faculty member to be appointed by the President of the University, and a graduate secretary. The manager is to be appointed by the Executive Committee every two years. The graduate secretary is to receive a salary, and will have the direction and su-



Albert Plaw.

pervision of the business affairs of the students. A great deal of loose business management in the past has resulted in leaving the Associated Students burdened with debt.

In general the outlook is favorable. In track sports and in tennis the standard is especially excellent. It is a disappointment that, with the Bay of San Francisco stretching out so enticingly before the University of California campus, there is practically no rowing. There is a boat club, but no eight-oared crew.

NAVAL ACADEMY ATHLETICS.

THE Naval Academy baseball team of 1900 had abundant energy and snap, as the game with Pennsylvania showed, and the quality of the cadet pitcher was evidenced by Penn getting but eight hits, while the cadets got sixteen off the visitors.

Better material could not be had at any college than was found at the Academy this year, but hindrances to baseball at the national institution are such as to make it well-nigh impossible to develop a team to the limit of its possibilities. Daily until four o'clock in the afternoon the cadets are busy with their studies. At four they have two hours at infantry, artillery or seamanship drill; following this, when they are naturally somewhat tired, they have thirty minutes for baseball.

Saturday is the only day of the week on which they can play a game. Nor are the cadets permitted to journey from the home grounds. The season closes for the cadets when it is just at its height elsewhere; they take annual examinations the latter part of May, and are at sea during June, July and August.

Taking into consideration the fact that there was no baseball at the Academy during the seasons of '97 and '98, and that a coach has never been employed, the nine deserves much credit for its excellent work this year. Ellis filled the box ably, and pitched strong ball, greatly aided by Barthallow at the other end of the delivery.

In the seven games of this season, only two visitors were allowed to steal second.

Short and second base caused little worry, owing to the good work of Childs or Berrien respectively, while Weaver covered first well. The right wing of the in-field was very strong all through. Hamner showed a cool head at the bat and clever work in center, which gave him a fielding average of 1,000. He will pilot the team through next season, with Norris as manager.

The team was worked hard all season in the net, as the number of hits suggested, but

the base-running was below standard. Barthalow's hits came at the proper time, two of which were good for four bags. He led his team in batting with an average of 407, Berrien coming second with 400. Weaver led with the stick last year, having 438, Barthalow following with 384.

Berrien, Ellis, Dodd and Barthalow graduate this year, thus taking away the battery, and weakening second considerably; but Raudenbush, a new man, showed good pitching qualities in two games this season.

Games are already being considered for next year with Harvard, Yale, Princeton, Georgetown, Lehigh, Columbia, Pennsylvania, Pennsylvania State, Lafayette University of West Virginia and University of Maryland.

CONSIDERING the very limited time Cadets have for training, the four new records as the result of the annual track meet (May 26) were very gratifying. McNair changed the figures in the one-mile run from 5m. 3s. to 4m. 45 1-5s.; Wainwright and Blackburn in the high jump tied at 5ft. 7½in., which broke the old record by a quarter of an inch. Both of these men are good for better performances. Wainwright has already cleared 5ft. 9in., and Blackburn is improving at such a rate that he is pretty sure to clear 6ft. before the end of another year.

Willson broad-jumped 20ft. 7in., which broke the old record by 5in. In addition to this, Willson won also the quarter and 100 yards; he is a new man, who by the time he reaches his first class should be very promising in academy athletics.

Berrien, one of the academy's noted athletes, did the 120-yard hurdle in 16 2-5s., which is several seconds better than the old record, and an especially good performance considering the heavy track. Perhaps the most absorbing event of the meeting was the class relay race, won by the first class with Landenberger, Berrien, Noa and Huff.

The academy records are:

100 yards, 10s.; 120-yard hurdles, 16 2-5s.; 440-yard run, 53s.; 880-yard run, 2m. 11 2-5s.; one-mile run, 4m. 45 1-5s.; high jump, 5ft. 7½in.; broad jump, 20ft. 7in.; 16-lb. shot, 35ft. 9½in.; 16-lb. hammer, 92ft. 7in.; pole vault, 10ft. ¾in.

MILITARY ACADEMY ATHLETICS.

IN November, 1892, the officers stationed at West Point saw the necessity for bringing under organized control such athletics as were permitted the cadets. Thus was organized the Army Officers' Athletic Association. Up to that

time, a few games of football and baseball had been played with students of other institutions, notably two football games with Annapolis. The Officers' Association proceeded at once to put athletics upon a substantial basis, appointing one member to look after each sport, and to do all in his power to promote that particular branch of athletics.

Football, of course, has from the first been the favored game, although baseball was played before football was thought of. Up to 1890, there was little of athletics of any description; there were occasional baseball games between the different classes—the first was played in dress-coats, and cadets who unbuttoned them were reported! Orders were then issued that cadets would be permitted to play in "shell jackets." Later they were allowed to appear in white shirts and the ordinary gray trousers. Finally the authorities were persuaded to permit the regulation baseball suit. Baseball has never received much encouragement at West Point, because time for practice is so limited that it has been impossible to sufficiently develop the little material which presents itself to play other than an ordinary game. Then, too, West Point seems not to get its share of experienced material.

Track games were inaugurated in April, 1893, but as cadets are not permitted to compete with other institutions, class team competition has been the sole means at West Point, as it is also at Annapolis, of keeping interest alive.

When the limited preparation period is considered, it is remarkable that performances are as creditable as they are. Conditions existing at the Military and Naval Academies would make athletics at any other institution impossible. At no other place in the world must a student make such sacrifices of comfort and pleasure as at the national academies, in order to indulge in athletics. It is only immediately after rising in the morning, a few minutes after dinner and supper, and such odd minutes as he may find between drills, that the cadet has time to give his sport.

There is no cinder path at West Point, and track games are held on the ordinary drill ground, which is not specially prepared. Taking this into consideration, the records are creditable:

100-yard dash, 10 1-5s., Connor—Barlow, 1897; pole vault, 10ft. 9in., Peek, 1901; broad jump, 21ft. 7in., McNally, 1899; shot, 37ft. 11½in., Romeyn, 1899; 220-yard hurdle, 22 4-5s., Barlow, 1897—Clark, 1901; 120-yard hurdle, 16¾s., McNally, 1899; 440-yard hurdle, 52½s., Saltzman, 1896.

NOTABLE PERFORMANCES AND RECORDS.

Conducted by William B. Curtis.

THE annual Intercollegiate Athletic Championship Meeting usually makes work for compilers and correctors of record tables, and this year's competitors were fully up to the standard; but bad weather interfered so seriously with good performances that no American records were broken, and in only four events were previous collegiate performances equaled or beaten. A storm during the forenoon of the first day left the track soft and the field slippery, while the rain which fell drearily the afternoon of next day made matters worse.

Published comment on this meeting shows that the distinction between a collegiate record and an intercollegiate record is not generally understood. The laws of the Intercollegiate Association of Amateur Athletes of America provide that an intercollegiate record can be made only at the annual championship meeting, whereas a collegiate record may be made by a collegian at any amateur games. Intercollegiate records are, therefore, necessarily collegiate records, but many collegiate records are not intercollegiate records.

During the preliminary trials on Friday, F. Beck, of Yale, despite the slippery ground, put the 16-lb. shot 44ft. 3in., thus establishing new intercollegiate and collegiate records, the previous best having been 43ft. 8½in., by J. C. McCracken, Pennsylvania, in 1898, and 44ft. 1½in., by O. Hickok, Yale, at the Yale-Harvard match, Cambridge, Mass., May 18, 1895. Beck, although comparatively a small man, has a fine style, and will, no doubt, do still better.

ON the same afternoon, A. Plaw, University of California, threw the 16-lb. hammer 154ft. 4½in., thus supplanting former intercollegiate and collegiate records, which were 149ft. 5in., by J. C. McCracken, in 1898, and 153ft. 8in., by the same athlete, May 30, 1898, in the games of the N. J. A. C., at Bergen Point, N. J.

Plaw, a genial young giant of 19 years, looks more like a gentleman of leisure than an athlete, and shows no evidence of training. He was taught by Carroll, of San Francisco, one of the most skilful professionals in the world. Plaw moves with surprising quickness, and makes three turns, which naturally tend to pull him out of the ring, so that many of his attempts are foul, but he is likely to get in one or two fair throws in every competition.

At the match between the Universities of California and Pennsylvania, held on Franklin

Field, Philadelphia, Pa., May 28, Plaw lengthened his collegiate record by winning the hammer-throwing at 165ft. ½in., and also cleared 170ft. 7in., in an informal trial, before the competition.

THE most remarkable performance of the meeting was the final heat of the 120 yards hurdle race. A drizzling rain was falling, the track was so soft that the runner's foot slipped back a little at each take-off for a hurdle, and a light east wind blew against the men. A. C. Kraenzlein, University of Pennsylvania, did not touch any hurdle, and won in 15⅔s. The previous intercollegiate record was 15⅔s., by Kraenzlein, last year. At the fifty-fifth annual games of the N. Y. A. C., held September 28, 1895, on Travers Island, N. Y., S. Chase, of Dartmouth College, won the 120 yards hurdle race in 15⅔s., which shares the collegiate honors with Kraenzlein's two performances. The world's best record is 15⅓s., by Kraenzlein, at Chicago, Ill., June 18, 1898. That he could, under the circumstances described above, equal the best performance by any other man, and come within a fifth of a second of his own world's record, proves that he has not yet reached his limit, and, whenever all conditions are favorable, it is likely he will run the race in 15s.

AT the annual Decoration Day games of the Knickerbocker Athletic Club, held on their grounds at Bayonne, N. J., J. Flanagan, N. Y. A. C., won the hammer-throwing at 159ft. 10in., and in an exhibition cleared 171ft., which would, if regularly made, have become a new world's record. R. Sheldon, of the same club, won the discus-throwing at 121ft. 8½in., which is better than all previous performances, but the record cannot be allowed, because the throwing-ground was a trifle larger than allowed by the rules.

Sheldon has been peculiarly unfortunate at this game. In the annual amateur championship meeting, at Riverside, Mass., last fall, he cleared a distance greater than the world's record, but the implement proved to be an ounce short of the required weight. In each of these cases the fault was with the management, and not with the athlete.

THE chief event of the Olympic Games at Athens, Greece, in 1896, was a race over ordinary roads, from Marathon to Athens—42 kilometers, which is a trifle over 26 miles. In com-

memoration of the honors won by their athletes at these games, the Boston Athletic Association founded an American Marathon race, from the bridge above Ashland, Mass., to the Boston A. A. club-house, Blagden and Exeter streets, Boston, Mass. The roads are well made and well kept, but the route, although surmounting no great hills, has many ups and downs, some of which are steep enough to hinder a runner.

In the fourth annual race, held April 19th, the first third of the course had several muddy stretches which compelled the contestants to run on the side-paths. There were 29 starters, of whom 26 finished the whole distance. John Caffrey, of the St. Patrick's Athletic Club, Hamilton, Ontario, finished first, in 2h. 39m. 44 $\frac{2}{3}$ s., beating the best former American performance (2h. 42m.), over the same course. W. Sherring, Hamilton Young Men's Christian Association, was second, in 2h. 41m. 31 3-5s.

THE sixth annual relay race meeting promoted by the Athletic Association of the University of Pennsylvania was held April 28th, on Franklin Field, Philadelphia, Pa. The weather was warm and hazy, while a shifty wind, varying from time to time in both speed and direction, blew down the field against the regular finish. So, after the University 100 yards race, the competitors in the special 100 yards and the 220 yards races unanimously petitioned the referee to run the other sprints from the lower end of the path, as it was hard work to struggle against the wind. This was done, and in the 100 yards special A. J. Duffey, of Georgetown University, amateur 100 yards champion of America, won in 9 4-5s., two of the seven watches recording 9 3-5s. No claim for record will be made, but it is probable that Duffey would have finished easily in 10s. if there had been no wind; and whenever, during the coming season, he meets good day and good track, his name will no doubt be added to the list of American sprinters who have traveled 100 yards in 9 4-5s.

THE special running broad jump had six entries, but the actual competitors were only two, Myer Prinstein, Syracuse University, and A. C. Kraenzlein, University of Pennsylvania. The runway is smooth, hard and level, the take-off in accord with the rules, and the alighting-place on the same level as the take-off. The take-off plank, five inches in width, has warped slightly, so that the face of the plank at the left end slopes up from the starting side a little; but the other end is level, and the slope, in the middle, where the jumpers take off, is

near enough to a water level to make the jumps acceptable as records. Kraenzlein, ill with malaria, seemed to have no ambition, and jumped miserably, for him, although many well men would like to duplicate his performance. Prinstein also was awkward at the start, touching the plank but once, and then taking off about one inch behind the line. His three attempts were 23ft. 2in., 24ft. 7in. and 23ft. 4 $\frac{3}{4}$ in. His second jump was longer than Kraenzlein's world's record, but will hardly be allowed, as the wind was with the jumpers. Some onlookers were indignant that any one should dare to question the record; but a wind which kept all the high jumpers from one to two inches below their ability, blew down one of the pole-vaulting standards, and drove the sprinters to petition for a change in the direction of their races, must certainly have been a factor in the running broad jump, where a following breeze helps the jumper, not only in the run up to the mark, but in the subsequent flight through the air. During the hour following the jump, the referee asked about twenty spectators, all either officials or athletic experts, how much they thought the wind had helped the jumper; and their answers, running all the way from nothing to a foot, prove that the effect of a following wind on a running broad jump is not as yet scientifically determined.

Important recent decisions:

Cross-Country Running Metropolitan Championship, 8 miles over Jerome Park course, April 22; 41 starters—Won by M. J. McGarry, Pastime A. C., 51m. 8s.

English Amateur Golf Championship at Sandwich, Eng.—Won by H. H. Hilton, Liverpool Golf Club, 79.

New England Intercollegiate Tennis Association Championship, Longwood Court, May 16-18. Doubles—Won by Bates College team (Summerbell and Willis), who defeated Dartmouth (Hildreth and Moulton), 10-8, 6-3, 1-6, 6-2. Singles—Won by Gross, of Brown University, over Hildreth, of Dartmouth, 6-1, 6-4, 6-1.

Fourteenth Annual Championship New England Intercollegiate Athletic Association, at Worcester, May 19—Won by Williams 33 $\frac{1}{3}$, Brown 29 $\frac{2}{3}$, Bowdoin 25, Dartmouth 20 $\frac{2}{3}$.

New England Intercollegiate Cycling Association Championship, at Charles River Park, May 21—Won by Ray Murray, Massachusetts Institute of Technology, in 4m. 38 3-5s. B. L. Wells (Williams) second, H. M. Brown (Brown) third.

Southern Lawn Tennis Championship, Bachelors' Club Courts, Washington, D. C., May 23-29. Singles—Won by J. Parmley Paret, from John C. Davidson 5-7, 8-10, 6-2, 6-0, 6-3. Doubles—Won by J. Parmley Paret and J. C. Davidson over R. D. Little and F. B. Alexander by 2-6, 12-10, 7-5, 6-8, 6-4.

Golf, Championship of the Metropolitan Association over the Nassau Links, L. I., May 23-26—Won by W. J. Travis over H. M. Harriman, 3 up and 2 to play.

Open Golf Championship of Great Britain, at St. Andrews, Scotland, June 7-9—Won by J. H. Taylor, 309 strokes, over Harry Vardon, 317.

25th Annual Intercollegiate Athletic Championship, Columbia Field, New York, May 26, 1900.

Events.	Penn.	Princeton.	Yale.	Harvard.	Syracuse.	California.	Williams.	Cornell.	N. Y. Univ.	Winner.	Winner's Performance.	Intercollegiate Record.	Year made.
1st place, 5 points. 2d place, 3 points. 3d place, 2 points. 4th place, 1 point.													
100-yard dash.....	7	3						1		Kraenzlein, Jarvis, McClain, Matthewson.	10 1-5 sec.	† 9 4-5 sec. B. J. Wefers, Georgetown.....	1896
320-yard dash.....		5	3							Boardman, Mulligan, Cloudman, Boardman.	22 1-5 sec.	‡ 21 1-5 sec. B. J. Wefers, Georgetown.....	1896
440-yard run.....			5	1	3					Lee, Long, Clerk.	49 3-5 sec.	49 2-5 sec. M. W. Long, Columbia.....	1899
880-yard run.....		5	2		1			3		Perry, Hastings, Smith, Scrafford.	2 min. 3 3-5 sec.	1 min. 56 4-5 sec. Evan Hollister, Harvard.....	1896
One-mile run....	1	5					3	2		Cregan, Bray, Berry, Bushnell.	4 min. 24 2-5 sec.	4 m. 23 2-5 sec. G. W. Orton, Pennsylvania....	1895
Two-mile run....	5			2				1		Grant, Hall, Richardson, Gallagher.	9 min. 51 3-5 sec.	9 m. 51 3-5 sec. Alex Grant, Pennsylvania.....	1900
120-yard hurdles.	7				1		3			Kraenzlein, Potter, Remington, Lewis.	15 2-5 sec.	15 2-5 sec. A. C. Kraenzlein, Pennsylvania.....	1899
220-yard hurdles.	6			5						Kraenzlein, Willis, Hallowell, Remington.	25 1-5 sec.	23 3-5 sec. A. C. Kraenzlein, Pennsylvania.....	1898
High jump.....		2		4					5	Rice, Carroll,* Serviss, Rotch.	5 ft. 10½ in.	6 ft. 3 in. J. D. Winsor, Jun., Pennsylvania...	1897
Broad jump.....	5			1	5					Prinestein, Kraenzlein, Remington, Sherek.	23 ft. 8 in.	‡ 24 ft. 4½ in. A. C. Kraenzlein, Pennsylvania.	1899
Pole vault.....		5	5½					½		Johnson, Coleman, Horton, Kinsey-Adriance.	11 ft. 3¼ in.	11 ft. 5 in. R. G. Clapp, Yale.....	1899
16-lb. hammer....	5			1		5				Plaw, McCracken, Hare, Boal.	154 ft. 4½ in.	154 ft. 4½ in. A. Plaw, California.....	1900
16-lb. shot.....	3		5			3				Beck, McCracken, Plaw, Woolsey.	44 ft. 3 in.	44 ft. 3 in. F. Beck, Yale.....	1900
Total Points...	39	25	20½	14	10	8	6	7½	5				

* All tied for third; points divided pro rata.
† World's record held jointly by Wefers and John Owen, Jr. ‡ World's record.
Bowdoin won 1 and Georgetown 2 points in the 220 flat; Columbia 2 in the quarter; Brown 3 in the 2 miles.

FOR THE SPORTSMAN'S LIBRARY

After Wild Sheep in the Altai and Mongolia. By E. Demidoff. With 82 illustrations and a map. Rowland Ward, London.

NEXT to the wild sheep of Pamir, *Ovis poli* (of which the record head is—length 75 inches, girth 16, spread $54\frac{1}{2}$), those of Mongolia, *Ovis ammon*, supply the largest and most highly-prized trophies, and frequent a region but slightly known. Therefore, this account of a hunt in the Altai section of Mongolia will be taken up with interest by sportsmen—and laid aside in some disappointment. As a mere day-by-day description of the trip, little is lacking; but the author tells us practically nothing of the fauna and the flora of this partially explored country, nor, indeed, anything of the sheep, beyond his persistent stalking and killing of them. It is a pity the trained observation of the hunter-naturalist was wanting; there was need of it in this seldom-visited region, ranging from 7,000 to 11,000 feet in elevation, and inhabited only by scattering Kalmuks. Grayling were found in some of the streams, duck on the lakes, and a few deer of the red variety were seen. The hunting was very successful, 36 heads being brought out, while the author's companion, Mr. St. George Littledale (both sportsmen were accompanied by their wives), secured a head measuring in length 63 inches, girth $19\frac{1}{2}$, breadth (tip to tip) $41\frac{1}{2}$; which proved a record supplanting that of Major Cumberland; which measured—length $56\frac{1}{2}$, girth $18\frac{1}{2}$, breadth $33\frac{1}{2}$. The hunting was done between May and September, with .303 rifles, and most of the kills made at about 150 yards. How enormous these heads are, may the better be appreciated by comparison with the record of our Rocky Mountain Bighorn (*Ovis canadensis*), which measures—length $42\frac{1}{2}$, girth $16\frac{1}{4}$, spread $25\frac{3}{4}$. In size, the Marco Polo sheep stand at the shoulder 48 inches, Mongolian variety 45, and the Bighorn 38. The book is a handsome volume, with many drawings by Mr. E. Caldwell.

Sport and Travel, East and West. By F. C. Selous. Illustrated. Longmans, Green & Co.

MR. SELOUS is more than a hunter of big game. He is an alert and intelligent observer, and his account of a trip is, therefore, invariably interesting and instructive. This volume represents several trips into Asia Minor after the magnificent horned wild goat, *Capra ægagrus*, and the large, long-faced red deer, *Cervus maral*; and two trips to the Rocky Mountains after wapiti, mule deer, and antelope. There are no game laws in Asia Minor, or a close season, and as the goats are constantly hunted by the natives, in addition to having unusual vitality, they are very wild and among the very hardest

of trophies to secure. Their horns are beautifully curved, sweeping to the haunches, and sometimes attaining a length of four feet, which makes them indeed one of the handsomest prizes to be won by the hunter. Mr. Selous used a .303, and lost several animals through the wound of the small bullet closing and allowing no effusion of blood. He was successful, however, after a very hard trip. Mr. Selous' hunting in America was chiefly in Wyoming, and proved successful. It is interesting to know that he considers our antelope, *Antilocapra americana* (which means, literally, American goat antelope), misnamed. The prong horn, he declares, in habits, appearance, and nature of country it frequents—in fact, in every particular, except that of annually shedding its horn sheaths—is a true antelope, as far removed from any species of wild goat as it is from wild sheep. Shedding its horns is, to be sure, a remarkable distinction, but one that does not bring it nearer the goats. It is a handsome book, well illustrated by the author's photographs.

The Heart of the Ancient Wood. By Charles G. D. Roberts. Illustrated. Silver, Burdett & Co.

THIS is a romance, in the very best sense; conceived in the true poet's fancy, and wrought with an artist's skill. It is the most pretentious of the author's prose works, and, certainly, one of the most delightful. Mr. Roberts is distinctly individual; and he knows well both his woods and his animals. There is none of that sentimentality which we find in some animal stories. His lines of thought are higher; his sympathy with the animals really deeper. It is my deliberate judgment that no work has been done in this particular field, to equal that of this Canadian poet.

The Trap Shooter's Guide. With illustrative diagrams. Winchester Repeating Arms Co.

IN very handy form this guide gives details on three points important to the trap shooter: "The Winning Loads," "The Rules," and for the first time in booklet form it gathers "The Various Systems of Dividing at Tournaments." Every trap shooter will be wise to have the Winchester Guide "in his inside pocket." The illustrations maintain the reputation which the Winchester Company have long established by their artistic annual calendars, the latest of which is unusually handsome, from the well-known brush of A. B. Frost.

The Union Metallic Company's calendar has also just been issued, is also handsomely illustrated, and can be had on application at the Company's office, Bridgeport, Conn.

THE AUTOMOBILE

THE United States, in all probability, contains, at this moment, more automobilists and automobiles than any other country, France included. This astonishing leap to the front is due to the very rapid production of steam vehicles, and electric cabs and carriages, in a few factories. The output of two steam-vehicle and four electric-vehicle factories, in this country, represents at least five sixths of the total; and nothing at all corresponding to the capacity of these six factories is to be found in any other country.

The supremacy of the United States is of recent date; one year ago our rank was fourth. In number of gasoline vehicles we are still far behind, but preparations are now being made for organizing this branch of the industry on a large scale also. At least five gasoline-motor vehicle factories, two of them in the West, have ordered quantities of machinery, with an eye to rapid and economical production.

THERE might be a still greater activity in this branch, were it not for the deterring effect of the great slump in the French industry, which has made our builders pause and consider whether the public are to be relied upon to accept their product. In France the slump was not caused by flimsy construction, but by the manufacturers catering too much to sport and speed requirements, and too little to general utility. The price of their vehicles was too high; their adaptation to ordinary traveling and pleasure purposes too limited. The best French manufacturers are now trying to remedy the situation, by following the American lead, and building more small carriages of the *voiturette* or runabout class.

Those Americans who have imported French or German racing or road vehicles are finding them excellent for very high speeds, and stanch in their wagon work; but hard to take care of, delicate in motor mechanism, inconvenient to repair, and generally to be classed as "white elephants."

The winter season has brought to renewed notice the troubles arising from freezing of gauge pipes in steam carriages, and of the cooling water in gasoline vehicles, as well as the effect of cold weather on the carburation in the latter. Preventatives are proposed in every issue of the technical press: certain ways of wrapping the pipes, admixture of glycerine, or alcohol, in the cooling water; but nothing better than watchfulness, and a liberal use of common sense in each case, has apparently yet been devised.

Two of the large farm-machinery makers, the McCormick and the Deering companies of Chicago, had auto-mowers at the Paris Exposition. These machines are mowers of the usual type, except that they are self-propelling by means of a gasoline motor. They represent, as far as the writer knows, the first serious attempt at introducing automobilism in farm work; unless the slow and heavy self-propelling steam threshing machine be counted an automobile.

THE interest of automobilists in this experiment lies deeper than the novelty, being connected with the problem of "good roads." It is the boast of American manufacturers—and well sustained by the users—that our automobiles can be driven successfully through mud and sand, and over very bad roads, if only the speed is moderated. But it is generally admitted that the charm of automobile pleasure-driving, as well as its cost, depends very largely on good roads, which will allow high speeds and low consumption of gasoline or electric current. It is hoped that when the agriculturists become practically acquainted with automobiles, they will also learn the value of good roads, and will assist, instead of obstructing, the agitation for having them built. The League of American Wheelmen, which is the representative good roads association of national scope, has signified its willingness to cooperate with automobile clubs, but the organizations of the latter have not yet solidified to the extent of grappling with this great problem in earnest. They are at present more immediately interested in questions pertaining to automobile repair shops, charging stations, storage, automobile exhibitions, and driving schools. Most of these questions are being solved gradually by private enterprise, however. New York already has nearly a score of shops where automobile repairing may be done by competent mechanics; and in several of these places machinery has been installed which will permit radical repairs of almost any style of automobile. Private electric charging plants are furnished to order, for out-of-the-way places, where current cannot readily be obtained. Driving schools, where the operating of automobiles may be learned before one has made his selection among the various makes, are constantly on the tapis; but the great expense involved in ground rent, and suitable arrangements of the building, have, so far, militated against their realization.

M. C. KRARUP.



A TIBETAN SALUTE.

O U T I N G

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RACING FOR THE KATA:

THE VEIL OF LOVE AND FRIENDSHIP—THE SPORTS OF THE TIBETANS.

By A. Henry Savage Landor, Author of "In The Forbidden Land."

"**B**ING, bang!" went the matchlocks one after the other, as the men rode furiously past me, holding the reins firmly between their teeth that they might have both arms free to raise perpendicularly their heavy and cumbersome matchlocks. These weapons have props attached to them, useful enough to take steady aim, but much in the way when riding. Indeed, this salute was a greater and more elaborate feat than it looked, for when the men once started full gallop they could no more touch the reins with their hands. Each man had to unsling his matchlock from his back, let down the prop, light the fuse by means of his flint and steel, place some gunpowder in the cup, and last, but not least, fire off the shot—that is to say, when it would go off; for it did not always. When doing this the men, partly to avoid being thrown off by the frightened steeds, partly to prevent the matchlocks flying from their hands by the overcharge of gunpowder, leaned so far backward that their bodies were almost down to the pony's back; holding fast to the saddle with their knees. Great amusement prevailed among the excited spectators when, after all these preparations and precautions, no explosion took place. The disappointed rider had to try again. The men were quite in earnest and attached much importance to the praise or blame of the officials present, as well as to the enthusiastic yells or deafening hisses of an approving or disapproving crowd.

Horse races are run in Tibet in a peculiar, yet quite sensible manner. Only two ponies are started at a time, the final race being run by the winners of the two best heats on "the survival of the fittest" principle. The race is usually run around the base of a hill or round an encampment of tents—the Tibetans being under the impression that circumambulation of any kind is equivalent to prayer, and pleases God. Thus, as in their prayer-wheels, the wheels are always revolved with a motion on its own axle from left to right; so are the races run in a similar revolutionary direction from the standpoint of the spectator looking towards the object round which the race is to be run.

The riders keep quite close together, the couples being usually very well matched, and such simple means as seizing one's opponent's reins, or lashing him, or his pony's head to keep them both back, or even to push or pull the rider altogether off his saddle are considered quite fair and legal means to win the race. The last heat is rather an exciting one—especially for the spectators—for blows with the lash are administered liberally to both horses and riders taking part in it. It occasionally results in a regular hippic wrestling match, when both riders, clinging tightly together, tumble over and roll to the ground. This does not put them out of the contest, but taking their time over it, they recapture the ponies, mount and continue as if nothing had happened.

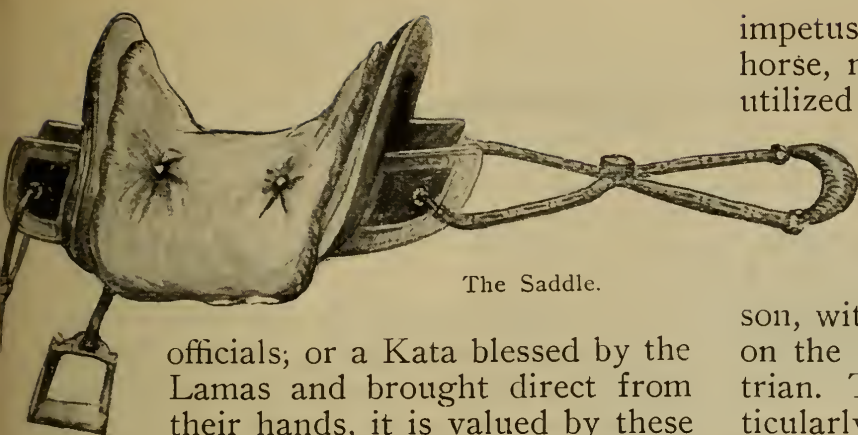
Their sheep-skin clothes are so thick that even when they lash one another hard the noise is great, but the pain is *nil*. It is different when they catch one another across the face. The winner is presented by the umpire, whether a high Lama or a military officer, with a Kata, or "Scarf of love and friendship," a long piece of silk-like gauze, the ends of which have been trimmed into a fringe.

These Katas play a very important part in the social customs of the inhabitants. They can be purchased or obtained from the Lamas at any monastery, but when no monastery is at hand the natives themselves make them of any material, for no

gift can be sent nor is ever accepted without "the veil of friendship." No caller enters a tent without a Kata in his outstretched hands, which he lays at the feet of his host. Diminutive Katas are enclosed in letters, sweethearts exchange Katas on every possible occasion—until they are actually married. Polandry prevailing in Tibet, when one of the husbands returns to his wife after an absence, he does not forget to bring a Kata with him, and as for not offering a Kata to an honored visitor, there could be no more palpable breach of manners or greater slight! When it comes to a handsome Kata won in a race before high



Capturing the Veil of Friendship.



The Saddle.

officials; or a Kata blessed by the Lamas and brought direct from their hands, it is valued by these simple folks more than a gift, money or food. It is prized by the whole tent-hold, and is handed down to posterity.

Round the Kata, too, hangs another difficult feat in a sport traceable in every country where good horsemanship is to be found. A horseman—a high official—revolves the Kata in the wind seven times and then darts full gallop in one direction, followed by twenty, thirty or more horsemen, all riding wildly and trying to push their neighbors out of the way. The official, some twenty or thirty yards ahead, flies the Kata in the wind, letting it drop at an opportune moment. The Kata eventually settles on the ground and the riders gallop away yelling, shouting and quarrelling. When some distance off a signal is given them by the officer, who then acts as umpire, and the crowd rushes back wildly, all the riders converging towards the spot where the Kata fell, clinging to the saddles with one hand and bending down from their ponies, attempting to pick up the Kata without dismounting.

There are usually, on such occasions, a number of collisions and subsequent falls, but, although this sport seemed to partake more of the character of an all-round fight amidst the ponies' legs, somebody always succeeded in picking up the scarf, and riding triumphantly all round the camp, fluttering it in the wind. Some of the younger fellows were extremely clever at this port, and when one rider did it singly he hardly ever missed picking it up at the first swoop.

More difficult in appearance, yet easier in reality, once the rider has got the knack, is another exercise, that of lifting bodily on to the saddle a man standing on foot, while the rider's horse is at full gallop. The pedestrian is usually seized as low down near the waist as possible, and the

impetus caused by the motion of the horse, not the rider's actual strength, is utilized in raising the body to the saddle.

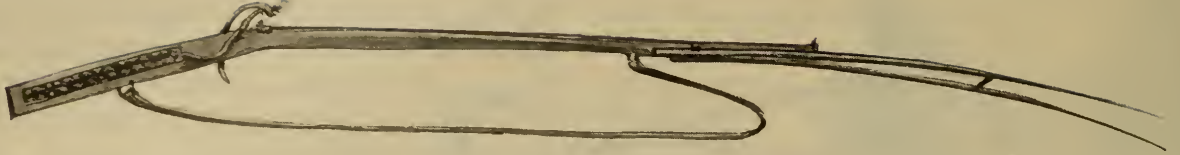
The semi-unsuccessful attempts of inexperienced riders are very comical, and generally result in a considerable amount of bumping of the suspended person, with consequent sprawling pell mell on the ground of both rider and pedestrian. The women were apparently particularly interested in this sport, and I was told that this simple mode is put to particular use by enterprising lads of the Forbidden Land, to overcome the scruples of reluctant fair maids who do not reciprocate their love. Waiting for a suitable opportunity the young lady of his choice is carried away bodily by the horseman and conveyed, in due haste, to his tent with the honorable intention of making her a happy bride.

"But," I inquired, "should the person make a resistance it must be very difficult?"

The Tibetan gave me a mingled look of pity and sarcasm. The fact that women should ever make an earnest resistance to being carried away! I suppose he knew better. Women are scarce in Tibet, and actual raiding parties, I was told, have been known between tribes to obtain a fresh supply of the fair sex.

Looking forward to such contingencies probably explains the reason why, of all the sports to be noticed in Tibet, this raiding exercise seems to be the most popular. Nearly every man in Tibet is a good horseman, but when it comes to fancy tricks requiring an extra quantity of daring and skill, the Tibetan is nowhere. He values his bones too much to risk them for the sake of showing off, unless there is some use attached to it. Every now and then some youth will perform feats of skill, such as standing on the saddle while the pony is at full speed. The feet are not on the saddle itself, but in the stirrups raised high on each side of the saddle, which he presses tight with his ankles, thus rendering it much easier to maintain his balance. This feat is much admired all over Central Asia and in the Caucasus. The Cossacks, as every one knows, particularly excel in it.

Tibetan men and women ride astride. Though, from our point of view, they may not be graceful riders, still they can



The Matchlock.

stick on a horse's back as well as anybody. They ride on saddles very high in front and back, not unlike Mexican saddles, or the familiar saddles adopted by the Cossacks, as well as by other people of all over Asia. The Tibetan does not ride with long stirrups, so as to have his legs distended, nor does he ride with a slightly shorter stirrup in the English fashion, but he goes to the other extreme and absolutely sits on the saddle as you would in a chair, with the knees bent, the legs doubled at right angles, the feet being supported on very short stirrups. To maintain his equilibrium, especially when riding full gallop, he balances himself with his arms outstretched sideways. As I often had to ride Tibetan saddles, I had to agree with the natives, that under the circumstances this was the only practical and comfortable way of riding on those saddles.

Taking things all round, it has many practical advantages over other methods in such a mountainous and rugged country. Then, again, when riding in caravans and driving yaks or ponies, one's legs are always out of the way, and can easily and quickly be raised above the

pony's back, either on one side or the other, to prevent getting them jammed against a rock or against other animals, a common and wicked trick of those hill ponies. The saddles are made of solid wood, imported from India, Nepal or China, and set in hammered iron, inlaid with silver or gold. Either lizard skin or colored leather is employed to ornament the front and back of the saddle, and a pad covers the otherwise very angular seat. Over this one or two rugs are placed for extra comfort, and slung behind the saddle are double bags containing *tsamba*, butter, *chura*, or cheese, and a brick of compressed tea, together with the never-absent wooden peg and yards of yak ropes with which no Tibetan horseman goes unprovided, for the tethering of his pony at night.

One may accuse a Tibetan of anything except of being a good shot. True, their weapons are hardly of the precision required to ensure even the slightest approach to accurate shooting. Indeed, I have reason to believe that it is more dangerous to be behind their clumsy fire-arms than in front of them. Those who have read the British Government In-

quiry and Report of my imprisonment in Tibet will remember that twice I was fired upon, by selected marksmen posted only a few paces from me, and neither time was I hit. I have, on other occasions, seen them shoot, never at a longer range than twenty or thirty yards, but it has never been my luck to see them strike the mark. There are several reasons for this, and neither the individuals themselves nor their home-made weapons are absolutely to blame for it, for nothing in the world is more difficult than to shoot accurately at very great elevations, such as 15,000 or 16,000 feet above sea level. The higher one goes naturally the more dif-



The War Dance.

difficult it is, owing to the extremely rarified and limpid air, which not only prevents one from estimating the range with accuracy, but alters the trajectory of the missile to a considerable extent. With my own .256 Manlicher sporting rifle, as good a weapon as was ever made, at 15,000 feet I had to aim a foot lower than the mark to make a bull's-eye, the range being 100 yards.

Necessarily when added to this difficulty they fire with their defective smooth-bore matchlocks, wretched gun-powder, badly-made bullets, a crooked sight and the most primitive of fuse-firing appliances, it is no wonder that they hardly ever hit the mark. I say this, for otherwise the Tibetan has rather a steady hand and a fairly accurate eye. I have seen Tibetans make quite creditable performances with bows and arrows. Such an antiquated method is, however, now considered obsolete by the natives.

Where the Tibetan is indeed skilful is in the use of a rope sling, which he always carries about his person, and this enables him, with constant practice, to fling stones to great distances and hit the mark every time with marvellous precision.

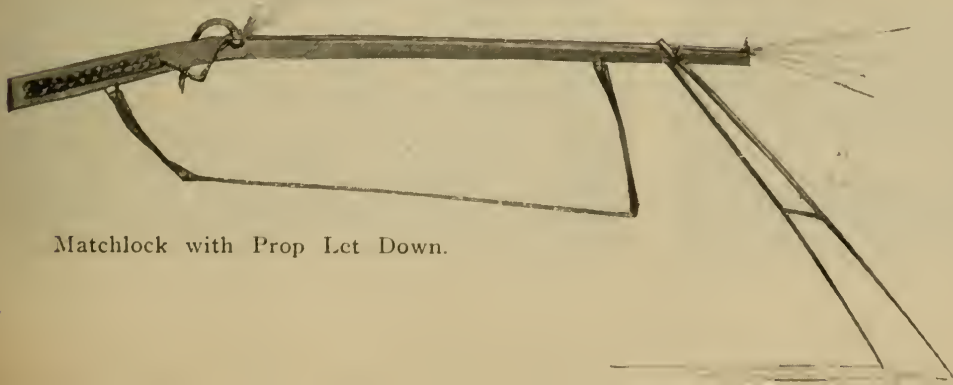
Men and women are adept at stone throwing, and I have seen them pick out and strike any sheep out of a large flock, never missing once. This may have led

to, or be the outcome of, that ancient and curious custom traceable all over Asia, the "Stone fights," similar in every particular to those of Corea and of some temples of Kumaon, except that in Tibet they are not fought on such a large scale, nor with the same fierceness as in the other-named countries. They are generally fought between the male members of two, or occasionally more, families, but seldom between factions, except in large towns, such as Lhasa, Shigatz, where these stone fight assume quite alarming proportions. They are a common amusement among the younger people, and a speedy method of settling controversies among rival families, besides affording amusement and excitement to the crowd of spectators watching the progress of the combat from a respectful distance.

A milder game in



Beginning the Dance.



Matchlock with Prop Let Down.

the same line, the most primitive and yet the highest form of golf; highest not because it is more perfect, but because it is played at higher altitudes in the world than any other form of golf, is also to be found in Tibet. Several young men having selected a stone as spherical in shape as can be procured by searching around the neighborhood, and not exceeding in weight more than forty or fifty pounds, swing it and throw it in turn into a hole of appropriate size several yards off. There are men that can accomplish it from a distance of ten or twelve yards, which, considering the weight of the stone and its shape, is not at all bad work.

Another form of the game is to select a smaller stone and perform the same feat by kicking it with the instep of one's foot, using one's own swinging stiffened leg, as if it were a golf club.

Perhaps the most interesting of all games and amusements in Tibet is their dancing, particularly are their war dances, extraordinary in people in themselves so little martial. With a sword in one hand and a long Kata in the other, their knees slightly bent, the performers keep time with the beating of a double drum and the clapping of hands from the spectators. They attempt some more or less clumsy revolutions on their heels, but the movements of their arms are very graceful. Alternately each arm is bent and held up in front of the head, while the other is down and far back, giving a pretty semi-rotatory twist to both forearms and hands when they have reached their highest and lowest points respectively. As the dancers and musicians get excited, the movements of the arms and legs, although practically identical except in duration, are greatly accelerated, and some of the best dancers can move their

arms and legs with such rapidity as to confuse the eye of the spectator to the extent that one distinguishes nothing but a shapeless moving mass. Owing to the rarified air they cannot keep this up very long, and panting, their lungs in convulsions and eyes bulging out of their sockets, they abruptly end the dance with a suggestive and humorous posture, or with a jump in the air, doubling up the body and resting the head on the knees before their feet touch the ground again.

The best dancing, from a Tibetan point of view, is when the performer can continue his evolutions, the legs keeping time with the arms, and each leg alternately bent at the knee until it nearly touches the ground.

The women's dancing has precisely the same characteristics, except that it is done with no sword. Only a Kata is held in the right hand. Their contortions are less accentuated, and, therefore, more graceful. The abruptness at the end is entirely done away with, together with the odd postures. The women danced singly when I was present, to the accompaniment of much sweeter and more sentimental music, and accompanied their movements with

sad, melodious chanting, weird and wild to a degree, yet full of feeling, and pleasing to the ear.

The best male dancers give solo performances to show their skill, and the rest join in a row, circling round and round him, until they are tired out and dizzy.

Wrestling is one of the few other sports to be noticed in Tibet. It is probably the rarest of all in South Western Tibet, and is carried on with no rules or regulations. Anything, from biting an opponent to kicking or tripping him, is good means to attain one's end, and as long as the opponent can be knocked and kept



Tobogganing.

down under the victor, until he says he is vanquished, that is all that is required to be a champion wrestler in Tibet.

When possible, tobogganing on their own backs is practiced by the natives to save themselves the trouble of long and steep descents on snowy mountain sides.

air. They seem to enjoy the fun, but look upon it more as a means of saving time and energy than as an amusement or an exciting sport.

One is safe in asserting that the sports and amusements of the Tibetans are few and of the most primitive kind. The fact



The Umpire at a Kata Race.

I have seen Tibetans slide on their backs at a terrific pace, and apparently unconcerned, for distances over one and even two hundred yards. They collect their long sheep-skin coats in front of them, and, except when required for steering purposes, their legs are raised up in the

that they seldom indulge in sports is partly due to the great altitudes which they inhabit, and where violent exercise of any kind is not without evil results to their health.

Amusements are the result of prosperity and happiness in people, neither of

which qualities are characteristic, or to be found in the Tibetan. He is generally retiring, sulky and depressed, although not devoid, at times, of a keen sense of humor if suddenly cheered by some unusual cause.

The wild existence that he leads from one end of the year to the other, his nomadic habits, often traveling over snowy mountain passes several thousand feet higher than the highest mountains of Europe, from dawn to sunset in the saddle,

make him naturally hardy. There is no such thing known in Tibet as being trained to be an athlete, nor is there any special school to educate the men and women in the few sports, games and amusements in which they indulge. Those are things inherited and passed along from one generation to the other, the younger ones imitating the older so closely that I have no doubt the characteristics of their sports and amusements to-day are exactly those of centuries ago.

JAN, THE UNREPENTANT.

A TALE OF THE NOME OF '97.

By Jack London.

"For there's never a law of God or man
Runs north of Fifty-three."

JAN rolled over, clawing and kicking. He was fighting hand and foot, now, and he fought grimly, silently. Two of the three men who hung upon him, shouted directions to each other, and strove to curb the short, hairy devil who would not curb. The third man howled. His finger was between Jan's teeth.

"Quit yer tantrums, Jan, an' ease up!" panted Red Bill, getting a strangle-hold on Jan's neck. "Why on earth can't yeh hang decent and peaceable?"

But Jan kept his grip on the third man's finger, and squirmed over the floor of the tent, into the pots and pans.

"Youah no gentleman, suh," reproved Mr. Taylor, his body following his finger, and endeavoring to accommodate itself to every jerk of Jan's head. "You hev killed Mistah Gordon, as brave and honorable a gentleman as ever hit the trail aftah the dogs. Youah a murderah, suh, and without honah."

"An' yer no comrade," broke in Red Bill. "If you was, you'd hang 'thout rampin' around an' roarin'. Come on, Jan, there's a good fellow. Don't give us no more trouble. Jes' quit, an' we'll hang yeh neat and handy, an' be done with it."

"Steady, all!" Lawson, the sailorman, bawled. "Jam his head into the bean pot and batten down."

"But my fingah, suh," Mr. Taylor protested.

"Leggo with y'r finger then! Always in the way!"

"But I can't, Mistah Lawson. It's in the critter's gullet, and nigh chewed off as 'tis."

"Stand by for stays!" As Lawson gave the warning, Jan half lifted himself, and the struggling quartet floundered across the tent into a muddle of furs and blankets. In its passage it cleared the body of a man, who lay motionless, bleeding from a bullet wound in the neck.

All this was because of the madness which had come upon Jan—the madness which comes upon a man who has stripped off the raw skin of earth and grovelled long in primal nakedness, and before whose eyes rises the fat vales of the homeland, and into whose nostrils steals the whiff of hay, and grass, and flower, and new-turned soil. Through five frigid years Jan had sown the seed. Stuart River, Forty Mile, Circle City, Koyokuk, Kotzebue, had marked his bleak and strenuous agriculture, and now it was Nome that bore the harvest—not the Nome of golden beaches and ruby sands, but the Nome of '97, before Anvil City was located, or Eldorado District organized.

John Gordon was a Yankee, and should have known better. But he passed the sharp word at a time when Jan's blood-shot eyes blazed, and his teeth gritted in

torment. And because of this, there was a smell of saltpetre in the tent, and one lay quietly, while the other fought like a cornered rat, and refused to hang in the decent and peaceable manner suggested by his comrades.

"If you will allow me, Mistah Lawson, befoah we go further in this rumpus, I would say it wah a good idea to pry this hyer varmint's teeth apart. Neither will he bite off, nor will he let go. He has the wisdom of the sarpint, suh, the wisdom of the sarpint."

"Lemme get the hatchet to him!" vociferated the sailor. "Lemme get the hatchet!" He shoved the steel edge close to Mr. Taylor's finger and used the man's teeth as a fulcrum. Jan held on and breathed through his nose, snorting like a grampus. "Steady, all! Now she takes it!"

"Thank you, suh; it is a powerful relief." And Mr. Taylor proceeded to gather into his arms the victim's wildly waving legs.

But Jan upreared in his Berserker rage; bleeding, frothing, cursing; five frozen years thawing into sudden hell. They swayed backward and forward, panted, sweated, like some cyclopean, many-legged monster rising from the lower deeps. The slush-lamp went over, drowned in its own fat, while the mid-day twilight scarce percolated through the dirty canvas of the tent.

"For the love of Gawd, Jan, get yer senses back!" pleaded Red Bill. "We ain't goin' to hurt yeh, 'r kill yeh, 'r anythin' of that sort. Jes' want to hang yeh, that's all, an' you a-messin' round an' rampagin' somethin' terrible. To think of travelin' trail together an' then bein' treated this-a way. Wouldn't 'bleeved it of yeh, Jan!"

"He's got too much steerage-way. Grab holt his legs, Taylor, and heave'm over!"

"Yes, suh, Mistah Lawson. Do you press youah weight above, after I give the word." The Kentuckian groped about him in the murky darkness. "Now, suh, now is the accepted time!"

There was a great surge, and a quarter of a ton of human flesh tottered and crashed to its fall against the side-wall. Pegs drew and guy-ropes parted, and the tent, collapsing, wrapped the battle in its greasy folds.

"Yer only makin' it harder fer yerself."

Red Bill continued, at the same time driving both his thumbs into a hairy throat, the possessor of which he had pinned down. "You've made nuisance enough a'ready, an' it'll take half the day to get things straightened when we've strung yeh up."

Red Bill grunted and loosed his grip, and the twain crawled out into the open. At the same instant Jan kicked clear of the sailor, and took to his heels across the snow.

"Hi! you lazy devils! Buck! Bright! Sic 'm! Pull 'm down!" sang out Lawson, lunging through the snow after the fleeing man. Buck and Bright, followed by the rest of the dogs, outstripped him and rapidly overhauled the murderer.

There was no reason that these men should do this; no reason for Jan to run away; no reason for them to attempt to prevent him. On the one hand stretched the barren snow land; on the other, the frozen sea. With neither food nor shelter, he could not run far. All they had to do was to wait till he wandered back to the tent, as he inevitably must, when the frost and hunger laid hold of him. But these men did not stop to think. There was a certain taint of madness running in the veins of all of them. Besides, blood had been spilled, and upon them was the blood-lust, thick and hot. "Vengeance is mine," saith the Lord, and He saith it in temperate climes where the warm sun steals away the energies of men. But in the Northland they have discovered that prayer is only efficacious when backed by muscle, and they are accustomed to doing things for themselves. God is everywhere, they have heard, but he flings a shadow over the land for half the year that they may not find him; so they grope in darkness, and it is not to be wondered that they often doubt, and deem the Decalogue out of gear.

Jan ran blindly, reckoning not of the way of his feet, for he was mastered by the verb "to live." To live! To exist! The deepest instinct of all life, and the first. Likewise the last. Buck flashed gray through the air, but missed. The man struck madly at him, and stumbled. Then the white teeth of Bright closed on his mackinaw jacket, and he pitched into the snow. *To live! To exist!* He fought wildly as ever, the center of a tossing heap of men and dogs. His left

hand gripped a wolf-dog by the scruff of the back, while the arm was passed around the neck of Lawson. Every struggle of the dog helped to throttle the hapless sailor. Jan's right hand was buried deep in the curling tendrils of Red Bill's shaggy head, and beneath all, Mr. Taylor lay pinned and helpless. It was a deadlock, for the strength of his madness was prodigious; but suddenly, without apparent reason, Jan loosed his various grips and rolled over quietly on his back. His adversaries drew away a little, dubious and disconcerted by this strange manœuvre. Jan grinned viciously.

"Mine friends," he said, still grinning, "you haf asked me to be politeful, und now I am politeful. Vot piziness vood you do mit me?"

"That's right, Jan. Be ca'm," soothed Red Bill. "I knowed you'd come to yer senses afore long. Jes' be ca'm, now, an' we'll do the trick with neatness and dispatch."

"Vot piziness? Vot trick?"

"The hangin' trick. An' yeh oughter thank yer lucky stars for havin' a man what knows his business. I've did it afore now, more'n once, down in the States, an' I can do it to a T."

"Hang who? Me?"

"Yep."

"Ha! ha! Shust hear der man speak foolishness! Gif me a hand, Bill, und I will get up und be hung." He crawled stiffly to his feet and looked about him. "Herr Gott! listen to der man! He vood hang me! Ho! ho! ho! I tank not! Yes, I tank not!"

"And I tank yes, you swab," Lawson spoke up mockingly, at the same time cutting a sled-lashing and coiling it up with ominous care. "Judge Lynch holds court this day."

"Von liddle while." Jan stepped back from the proffered noose. "I haf somedings to ask und to make der great proposition. Kentucky, you know about der Shudge Lynch?"

"Yes, suh. It is an institution of free men and of gentlemen, and it is an ole one and time-honored. Corruption may wear the robe of magistracy, suh, but Judge Lynch can always be relied upon to give justice without court fees. I repeat, suh, without court fees. Law may be bought and sold, but in this enlightened land justice is free as the air we

breathe, siron'g as the licker we drink, prompt as——"

"Cut it short! Find out what the beggar wants," interrupted Lawson, spoiling the peroration.

"Vell, Kentucky, tell me dis: von man kill von odder man, Shudge Lynch hang dot man?"

"If the evidence is strong enough—yes, suh."

"An' the evidence in this here case is strong enough to hang a dozen men, Jan, ' broke in Red Bill.

"Nefer you mind, Bill. I talk mit you next. Now von anodder ding I ask Kentucky. If Shudge Lynch hang not der man, vot den?"

"If Judge Lynch does not hang the man, then the man goes free, and his hands are washed clean of blood. And further, suh, our great and glorious constitution has said, to wit: that no man maytwice be placed in jeopardy of his life for one and the same crime, or words to that effect."

"Unt dey can't shoot him, or hit him mit a club over der head alongside, or do nodings more mit him?"

"No, suh."

"Goot! You hear vot Kentucky speaks, all you noddleheads? Now I talk mit Bill. You know der piziness, Bill, und you hang me up brown, eh? Vot you say?"

"'Betcher life, Jan, an' if yeh don't give no more trouble ye'll be almighty proud of the job. I'm a connesoor."

"You haf der great head, Bill, und know somedings or two. Und you know two und one makes tree—ain't it?"

Bill nodded.

"Und when you haf two dings, you haf not tree dings—ain't it? Now you follow mit me close un! I show you. It takes tree dings to hang. First ding, you haf to haf der man. Goot! I am der man. Second ding, you haf to haf der rope. Lawson haf der rope. Goot! Und third ding, you haf to haf someding to tie der rope to. Sling your eyes over der landscape und find der third ding to tie der rope to? Eh? Vot you say?"

Mechanically they swept the ice and snow with their eyes. It was a homogeneous scene, devoid of contrasts or bold contours, dreary, desolate and monotonous—the ice-packed sea, the slow slope of the beach, the background of low-ly-

ing hills, and over all thrown the endless mantle of snow.

"No trees, no bluffs, no cabins, no telegraph poles, nothin'," moaned Red Bill; "nothin' respectable enough nor big enough to swing the toes of a five-foot man clear o' the ground. I give it up." He looked yearningly at that portion of Jan's anatomy which joins the head and shoulders. "Give it up," he repeated sadly to Lawson. "Throw the rope down. Gawd never intended this here country for livin' purposes, an' that's a cold frozen fact."

Jan grinned triumphantly. "I tank I go mit der tent und haf a smoke."

"Ostensible y'r correct, Bill, me son," spoke up Lawson; "but y'r a dummy, and you can lay to that for another cold frozen fact. Takes a sea farmer to learn you landsmen things. Ever hear of a pair of shears? Then clap y'r eyes to this."

The sailor worked rapidly. From the pile of dunnage where they had pulled up the boat the preceding fall, he unearthed a pair of long oars. These he lashed together, at nearly right angles, close to the ends of the blades. Where the handles rested he kicked holes through the snow to the sand. At the point of intersection he attached two guy-ropes, making the end of one fast to a cake of beach ice. The other guy he passed over to Red Bill. "Here, me son, lay holt o' that and run it out."

And to his horror, Jan saw his gallows rise in the air. "No! no!" he cried, recoiling and putting up his fists. "It is not goot! I will not hang! Come, you noddleheads! I will lick you, all together, von after der odder! I will blay hell! I will do eferydings! Und I will die before I hang!"

The sailor permitted the two other men to clinch with the mad creature. They rolled and tossed about furiously, tearing up snow and tundra, their fierce struggle writing a tragedy of human passions on the white sheet spread by nature. And ever and anon a hand or foot of Jan emerged from the tangle, to be gripped by Lawson and lashed fast with rope-yarns. Pawing, clawing, blaspheming,

he was conquered and bound, inch by inch, and drawn to where the inexorable shears lay like a pair of gigantic dividers on the snow. Red Bill adjusted the noose, placing the hangman's knot properly under the left ear. Mr. Taylor and Lawson tailed onto the running-guy, ready at the word to elevate the gallows. Bill lingered, contemplating his work with true artist love.

"Herr Gott! Vood you look at it!"

The horror in Jan's voice caused the rest to desist. The fallen tent had uprisen, and in the gathering twilight it flapped ghostly arms about and titubated toward them drunkenly. But the next instant John Gordon found the opening and crawled forth.

"What the flaming——!" For the moment his voice died away in his throat as his eyes took in the tableau. "Hold on! I'm not dead!" he cried out, coming up to the group with stormy countenance.

"Allow me, Mistah Gordon, to congratulate you upon youah escape," Mr. Taylor ventured. "A close shave, suh, a powerful close shave."

"Congratulate hell! I might have been dead and rotten and no thanks to you, you——!" And thereat John Gordon delivered himself of a vigorous flood of English, terse, intensive, denunciative, and composed solely of expletives and adjectives.

"Simply creased me," he went on when he had eased himself sufficiently. "Ever crease cattle, Taylor?"

"Yes, suh, many a time down in God's country."

"Just so. That's what happened to me. Bullet just grazed the base of my skull at the top of the neck. Stunned me but no harm done." He turned to the bound man. "Get up, Jan. I'm going to lick you to a standstill or you're going to apologize. The rest of you lads stand clear."

"I tank not. Shust tie me loose und you see," replied Jan, the Unrepentant, the devil within him still unconquered. "Und after as I lick you, I take der rest of der noddleheads, von after der odder, altogether!"

THE GOLF OF THE NEW SCHOOL.

By Horace Hutchinson.

THERE has been a great deal of spring ferment, so to speak, in British golfing circles. The working up of the younger element proving yet again the truth of the proverb that "youth will be served." The strange thing in golf is that youth has not sooner insisted with emphasis on its rights.



Mr. H. H. Hilton, Amateur Champion. Great Britain.

Hitherto the younger school has been kept under with some success by the seniors. This year, for the first time, it has asserted itself, in something like its true force. The latest accession to the ranks of the older school, latest to be admitted into the rather select circle of the very best, was poor Mr. F. G. Tait, who was killed by a Boer bullet in South Africa. Mr. John Ball also went to the war, we hope, with better auspices, and his absence, too, gives another opening that would not have been if war could have been averted.

The opportunity has not been neglected. Here and there in the list of the year's chief competitions we read, at the head, one of the old, well-known names; but for

the most part the names are new, even if they do not always belong to the younger school.

The first intimation, to a slightly startled world, of the force of the younger school, was given by the performance of the Oxford University team in their annual match against Cambridge University, on the links of Sandwich. Not only did they beat their Light Blue rivals very severely, every member of the Oxford team beating his individual opponent, but every member was out, the first half of the round, under 40 strokes.

The uniform excellence of this play is obvious by the consideration that when the St. George's Vase was played for over the same course a few weeks later, and also the Amateur Championship Tournament, in no instance did a single competitor go out these nine in less than 36 strokes; and all the best of the amateur talent was there and on its mettle. The man that had the greatest reputation of these undergraduate players was Mr. H. C. Ellis. One, Mr. Bramston, at that time but little regarded, and actually playing no higher than fifth in the Dark Blue team, was also in the field, and beat his individual opponent very severely, holing the full course in 78 strokes.

Perhaps the next meeting of note was at Westward Ho, where the Kashmir Cup is given annually for competition open to all amateurs, over two rounds, scoring play, of the green. The result of the play for this cup was that the writer, a very old-time golfer, as will be admitted, was the winner, with Mr. Hilton and Mr. Osmond Scott, the latter quite one of the newest school, only a stroke behind.

It was the team matches of the week following the competition for the Kashmir Cup, however, that revealed the existence of a new golfing force of the first calibre in Mr. J. Bramston. He began the week by catching the writer badly off his game, and inflicting on him a defeat of which the memory still stings, and subsequently defeated Mr. Hilton and Mr. J. L. Low, successively, by a sufficient margin in each case.

This was, indeed, very fine work, and what made the last victory seem more im-



Jack Morris

Ball.

Robb, "Old Tom" and Richardson.

to be rather wanting.

At Muirfield, on the occasion of the medal meeting of the Honorable Company of Edinburgh Golfers (time-honored institution of a fine-sounding name) the winner was again one of those under-graduates of the Dark Blue persuasion, Mr. Mansfield Hunter, with Mr. C. Dalziel,

portant, was the circumstance that a few weeks later Mr. J. L. Low won the spring medal of the Royal and Ancient Club of St. Andrews. On this occasion there was but a poor representation of the younger school, so the result was not as interesting for the purpose of estimating the relative merits of the two schools as some others. Other competitions in Scotland tested the older players shrewdly, and it cannot be denied that they were found

also one of the younger school, second to him, while behind them in the list were such gallant players of the older type as Mr. J. E. Laidlay and Mr. Balfour-Melville, ex-champions both.

But the most emphatic assertion of the power of the younger men was given at the competition for the Tantallon Cup, at North Berwick, where Mr. R. Maxwell, a notable player of the younger men, won, in a gale of wind, with a score of 85, which



Mr. C. Hutchings, Driving.



Taylor, the British Open Champion, in a Bunker.

was actually eleven strokes better than the next return, although the field included such fine players as Mr. J. E. Laidlay and other men of mark. This Mr. Maxwell is a young player of great power, who first won his spurs, while little more than a boy, by defeating Mr. John Ball and Mr. Hilton in successive rounds at Muirfield on the occasion of the amateur cham-



Vardon, Defeated by Taylor, Approaching.

pionship being played there. Subsequently he succumbed to the eventual winner of that year's championship, Dr. Allen.

The meeting for the amateur championship of the present year fell by rotation to be played on the green of the St. George's Club, at Sandwich. With the exception of Mr. Ball, holder of the title, who was out of the kingdom, no amateur golfer of any great repute was absent. On the day preceding the tournament there was a competition for the St. George's Cup on exactly the same lines, two scoring rounds of the green, as in the competition for the Kashmir Cup at Westward Ho. Mr. Maxwell sent in, for the St. George's Cup, the best round, a 77, in the morning, and following it up well with 78 in the afternoon, won the cup, with several strokes to spare.

The next to him in the returns was Mr. J. Bramston, who had made his name at Westward Ho a week or two before, and in the afternoon had a round that equaled Mr. Maxwell's morning return, though in the morning he had scored 82. Here was a very decided triumph for the new school, who thus returned both first and second in a field that could not be excelled for the quality of the amateur talent represented. Mr. Hilton, Mr. C. Hutchings and Mr. H. C. Ellis, a mingling of the old and the new, were equal third at two strokes more than Mr. Bramston. Thereafter the big event of our amateur golfing year commenced.

By the fortune of the draw, it happened that unless things went contrary to expectation (as they are apt to go in this royal and ancient, but gloriously uncertain game) Mr. Hilton and Mr. Maxwell would meet in an early heat, and it was thought by a good many that these two were fighting out between them the eventual holding of the amateur championship. Fortune is more fickle than golf itself, and awards to some a series of hard matches, to others a fairly easy succession until the final heats. In a tournament of this kind it is inevitably thus. No conspicuous acts of injustice were apparent in the present case.

Mr. Hilton did, as appeared likely, meet Mr. Maxwell. The latter was not quite at his best, and showed the weakness of the younger school as compared with the more wily seniors in not correcting, by head work, any lack of perfect harmony

between hand and eye that his game suffered under, Mr. Hilton, with less driving power, was a deal wiser, and very steady and accurate. He picked up a hole whenever Mr. Maxwell gave him a chance to pick it back again. There is only one result of that kind of golf. He won by four up and three to play. Then in the final Mr. Hilton beat Mr. Robb, the latter not driving at all well, but making something like a fight with the winner by his excellent putting, which alone brought him into the final heat. Mr. Robb had played hard matches. He had knocked out Mr. Laidlay, the ex-amateur champion, by a single hole, and he had played a very hard match with Mr. Bramston—all even at the fifteenth hole, after saving himself by good putting at the thirteenth and fourteenth holes. This was in the semi-final heat, so it was as far as the semi-final that the younger school survived in the tournament, its representative being Mr. Bramston.

Probably Mr. Bramston is the most promising of all the younger school. He has the inestimable merit of being very young. He is but nineteen. He has good nerve, drives a very long ball, and though he has not nearly as many strokes as, Mr. Hilton say, he yet has enough resource for the ordinary exigencies, and a deal more power, a deal longer ball, than Mr. Hilton.

Mr. Maxwell is very possibly a better player for the moment than Mr. Bramston, though that is by no means demonstrated; but Mr. Maxwell has some five or six years advantage (at that blessed time of life it is an advantage) of Mr. Bramston in age, and more than corresponding advantage in golfing experience, for he has had better chances of playing against the best at North Berwick and in its neighborhood than Mr. Bramston in the few years of his golfing life at Westward Ho.

The final of the amateur tournament is hardly to be regarded as a test match between the old school and the new, Mr. Robb being hardly of the new school, although a younger man than Mr. Hilton.

Though the new school is thus asserting itself, still it is not to be denied that the amateur champion deserved the title thoroughly, by playing the best golf played in the competition. How good it was may be gauged by the fact that four up



Taylor, Approaching.



Mr. J. Ball, Jr., Driving.



Mr. H. H. Hilton, Driving.

and three to play was the smallest balance by which he beat any of his opponents. It was by this balance that he beat Mr. Maxwell, who gave him his hardest match, and who was really his most formidable foe. Mr. Graham might have been dangerous, but he was in no form. The only hard matches that Mr. Hilton had were against Mr. Maxwell and against Mr. Mr. Robb, and, as a matter of fact, they were only hard at the beginning, before

his steadiness had broken the back of their defence.

So that is how we in Great Britain stand at present. Mr. Hilton is probably the best of our amateurs, with a younger man or two treading dangerously close on his heels, he is able thoroughly well to stave them off at present by his greater knowledge and steadiness, but they, with greater power, are bound to assert, very soon, the advantage of their blessed youth.

BEATING TO WINDWARD.

THE SIMPLE ART OF BOAT-SAILING.

By A. J. Kenealy.

HERE is an old nautical truism to the effect that a haystack will sail well to leeward, but that it takes a correctly-modeled vessel to beat to windward. It is easy to comprehend how a straw hat thrown into a pond on its northerly edge will, under the influence of a

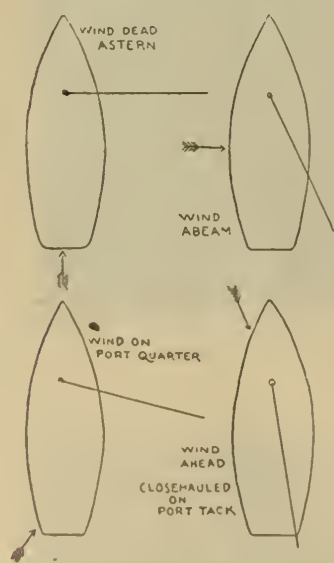


Diagram No. 1.
Sailing under Varying Conditions of Wind.

brisk breeze from the north, make a fast passage to the southerly bank. It is more difficult to understand how the same straw hat, if put into the water at the southerly end of the pond, might be so manoeuvred as to make a passage to the northern extremity of the sheet of water,

though the wind continued to pipe from the north. This was, no doubt, a tough nut for the early navigators to crack, and the problem may have taken centuries to solve.

The paddle was naturally the first means of propelling a rude craft through the water, and the ingenious savage (probably an indolent rascal) who discovered that a bough of a tree, or the skin of a beast extended to a favoring breeze,

would produce the same effect as constant and laborious plying of paddles, was presumably hailed as a benefactor by his tribe. But this device, artful no doubt in its inception, was only of avail while the wind blew towards the quarter in which the destination of the enterprising voyager lay. If the wind drew ahead, or dropped, the skin or leafy bough was no longer of use as a labor-saving contrivance, and the wearisome paddle was necessarily resumed.

The primitive square sail of antiquity embodies the same principle as that governing the motion through the water of the modern full-rigged ship, which is admirably adapted for efficient beating to windward, or sailing against the wind. Superiority in this branch of sailing is the crucial test of every vessel whose propelling power is derived from canvas, and the ship-builders and sail-makers of all seafaring nations have vied with each other for centuries to secure the desired perfection.

Beating to windward may be described as the method by which a vessel forces her way by a series of angles in the direction from which the wind is blowing. Some vessels will sail closer to the wind than others. That is to say, with their sails full, they will head a point or more nearer to the direction from which the wind comes than vessels of different rig.

Broadly speaking, an ordinary fore-and-aft rigged yacht with the wind due north, will head northwest on the starboard tack, and northeast on the port tack.

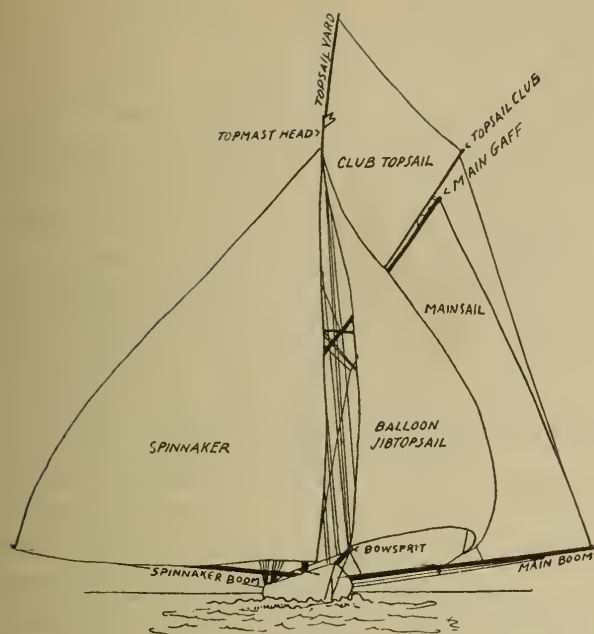


Diagram No. 2.
Running Before the Wind

That is, she will head up within four points of the wind. Some will do better than this by a good half-point. The famous old sloop *Maria*, owned by Commodore J. C. Stevens, founder of the New York Yacht Club, is said to have sailed within three points and a half of the wind, and I am informed that *Columbia*, in her races last year, achieved a similar remarkable feat.

A square-rigger, because the sails cannot be trimmed to form so sharp an angle to the breeze as a fore-and-aft rigged vessel, rarely sails closer than six points of the wind. Consequently, she has to make more tacks and consume a longer time in accomplishing a similar distance in the teeth of the breeze than a vessel driven by fore-and-aft canvas. It is possible to make my meaning clearer by means of simple diagrams, and to these I refer the reader.

A vessel is said to be close-hauled when the sheets are trimmed flat aft and the boat is headed as near to the wind as the sails will permit without their luffs shak-

ing. When a vessel is so trimmed, she is said to be sailing "full and bye," which means as close to the wind as the craft will point with the sails bellying out and full of wind. If a vessel is sailed so close to the wind that the sails quiver, the pressure is diminished and speed is decreased. Thus the art of beating to windward successfully consists in keeping the boat's sails full, while her head should not be permitted to "fall off" for an instant. This requires a watchful eye and an artistic touch. To become an adept, one should have plenty of practice.

A boat is on the starboard tack when the main boom is over the port quarter and the port jib sheet is hauled aft. The wind is then on the starboard bow. The

conditions are reversed when the craft goes on the port tack. In diagram No. 1, four conditions of sailing are shown, the figures representing a boat sailing with the wind astern, on the quarter, abeam, and close-hauled. It will be observed how the

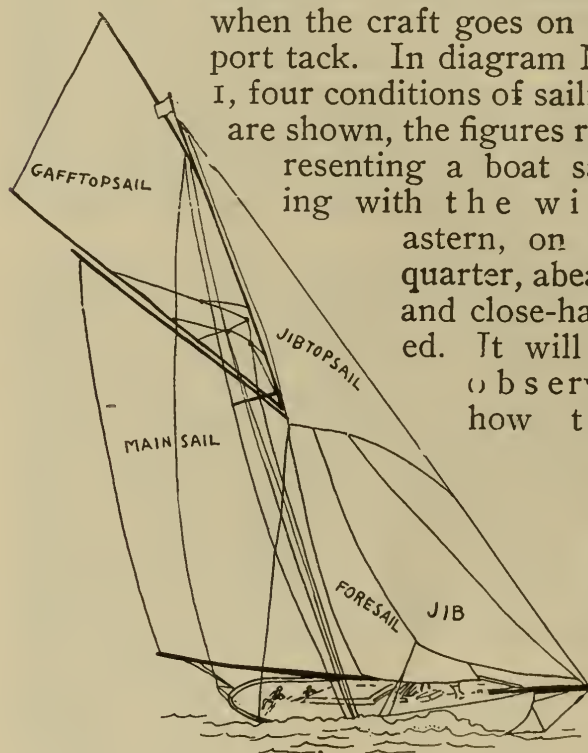


Diagram No. 4.
Close Hauled on Port Tack.

main boom is trimmed to meet the varied changes of wind or course.

Diagram No. 2 shows a racing yacht running before the wind with all her balloons expanded to the breeze. The spinnaker set to starboard not only adds greatly to her speed, but it also makes the steering easier, as it counteracts the pressure of the huge mainsail and club topsail on the port side, thus causing a nicely-adjusted balance. The balloon jibtopsail catches every stray breath of air that is spilled out of the spinnaker, and it also has considerable possibilities as a steering sail, in addition to its splendid pulling

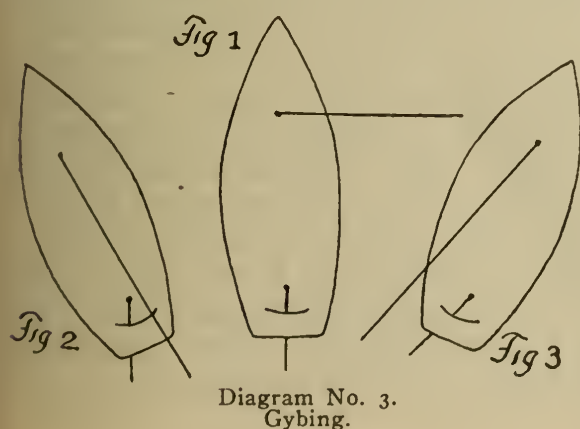


Diagram No. 3.
Gybing.

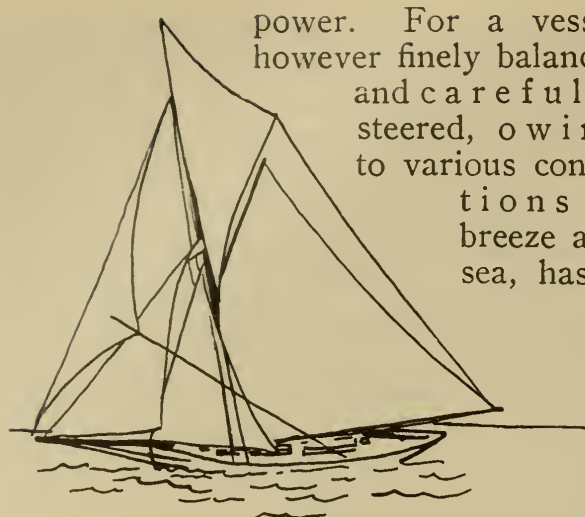


Diagram No. 5.
Close Hauled on Starboard Tack.

tendency to yaw and fly up in the wind. Thus a strong puff or a heavy sea striking the boat may make her swerve from her course in an effort to broach to. Then the jibtopsail does good service as, when it gets full of wind, it pays the head of the boat off the wind, and materially assists the helmsman in steadying the vessel on her course.

It may be remarked that steering a yacht under these conditions, in a strong and puffy breeze with a lumpy, following sea, calls for the best work of the ablest helmsman. A boat will generally develop an inclination to broach to, which means to fly up in the wind. Sometimes, however, the notion may strike her to run off the wind so much as to bring the wind on the other quarter, causing her to gybe.

This would mean disaster, probably a broken boom and a topmast snapped off short like a pipestem, with other incidental perils.

Diagram No. 3 shows the manœuvre of gybing, which is to keep the vessel away from the wind until it comes astern, and then on the opposite quarter to which it has been blowing.

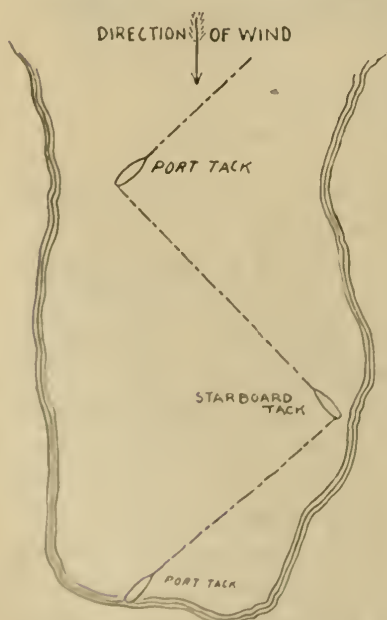


Diagram No. 6.
Dead Beat to Windward.

power. For a vessel, however finely balanced and carefully steered, owing to various conditions of breeze and sea, has a

Fig. 1 shows a boat sailing before the wind with the main boom over to starboard. Fig. 2 shows the operation of luffing to get in the main sheet. Fig. 3 shows the boom over on the port quarter, and the operation complete, except trimming sail for the course to be steered.

It may be remarked that gybing a racing yacht "all standing" in a strong wind requires consummate skill and care. A cool hand at the helm is the prime requisite, but smart handling of the main sheet is of scarcely less importance. The topmast preventer backstays should be attended to by live men. When a vessel is not racing, gybing in heavy weather may be accomplished without the slightest risk; the topsail may be clewed up and the peak of the mainsail lowered, and with ordinary attention the manœuvre is easily performed.

Diagrams Nos. 4 and 5 show the same racing yacht close-hauled on the port and starboard tack. The spinnaker and balloon jibtopsail are taken in. A small jibtopsail takes the place of the flying kite. This sail, however, is only carried in light winds, as it has a tendency, when a breeze blows, to make a craft sag off to leeward.

Diagram No. 6 shows a boat beating out of a bay with the wind dead in her teeth, a regular "nose-ender" or "muzzler." She starts out from her anchorage on the port tack, stands in as close to the shore as is prudent, goes about on the starboard tack, stands out far enough to weather the point of land, then tacks again, and on the port tack fetches the open sea.

Diagram No. 7 illustrates a contingency frequently met with in beating to windward, when a vessel can sail nearer her intended course on one tack than another. Thus suppose her course is East by South and the wind SE, she would head up East on one tack (the long leg) and South on the other (the short leg).

Diagram No. 8 depicts the manœuvre of tacking that is the method of "going into stays," or shifting from one tack to the other. Fig. 1 shows a boat steering "full and bye" on the starboard tack. It becomes necessary to go about. "Helm's a-lee!" cries the man at the tiller, at the same time easing the helm down to leeward and causing the boat's head to fly up in the wind. The jib sheet is let go at

the cry "Helm's a-lee!" decreasing the pressure forward and making the boat, if well balanced, spin round. A modern racer turns on her heel so smartly that the men have all they can do to trim the head sheets down before she is full on the other tack. Some of the old style craft, however, hang in the wind, and it sometimes becomes necessary to pay her head off by trimming down on the port jib sheet and by shoving the main boom over on the starboard quarter (Fig. 3). Soon she fills on the port tack, and goes dancing merrily along, as shown in Fig. 4.

In beating to windward in a strong breeze and a heavy sea leeway must be considered.

Leeway may be defined as the angle between the line of the vessel's apparent course and the line she actually makes good through the water. In other and untechnical words, it is the drift that the ship makes sideways through the water because of the force of the wind and the heave of the sea, both factors causing the craft to slide bodily off to leeward.

This crab-like motion is due to a variety of causes, to the shape of the craft, to her trim, and to the amount of sail carried, and its quality and sit. Boats deficient in the element of lateral resistance, such as a shallow craft with the centre-board hoisted, will drift off to leeward at a surprising rate. A deep boat of good design and fair sail-carrying capacity will, on the other hand, if her canvas is well cut and skilfully trimmed, make little or no leeway. In fact, she may, under favorable circumstances eat up into the wind and fetch as high as she points.

Leeway is always a dead loss, and to counteract it is always the aim of the practical seaman and navigator. Captain Lecky, in his admirable work, "Wrinkles in Practical Navigation," puts the case clearly, and his advice should be followed whenever feasible. He says: "Suppose a vessel on a wind heading NW by N, under short canvas and looking up within three points of her port, which, accordingly bears North; but owing to its blowing hard, she is making $2\frac{1}{2}$ points leeway. Clearly this vessel is only *making good* a NW by W $\frac{1}{2}$ W course, which is $5\frac{1}{2}$ points from the direction of port. Let her speed under these conditions be say, four knots per hour. Now, if the yards are checked in a point or so, and the vessel

be kept off NW by W, she will slip away much faster through the water, and probably will make not more than half a point leeway. This keeps the course *made good* exactly the same as before, with the advantage of increased speed. Therefore, if you can possibly avoid it, do not allow your vessel to sag to leeward by jamming her up in the wind. Keep your wake right astern, unless it be

found from the bearing of the port that the course *made good* is actually taking the vessel away from it, in which case it is obvious that the less the speed the better."

This excellent counsel applies to every kind of sailing vessel, whether square-rigger or fore-and-after, whether used for business or pleasure. It is of no avail to pinch a boat for the purpose of keeping her bowsprit pointed for her destination, when it is obvious that she will only fetch a point several miles to leeward. Keep the sails clean full and the boat will make better weather of it, as well as greater speed. It may frequently be necessary to "luff and shake it out of her" when struck by a hard squall, or, by the aid of a "fisherman's luff," to clear an object without tacking, but the broad rule to keep a sailing craft moving through the water and not permit her to pitch and rear end on to the sea should be more generally observed.



Diagram No. 7.
A Long Leg and a Short Leg.

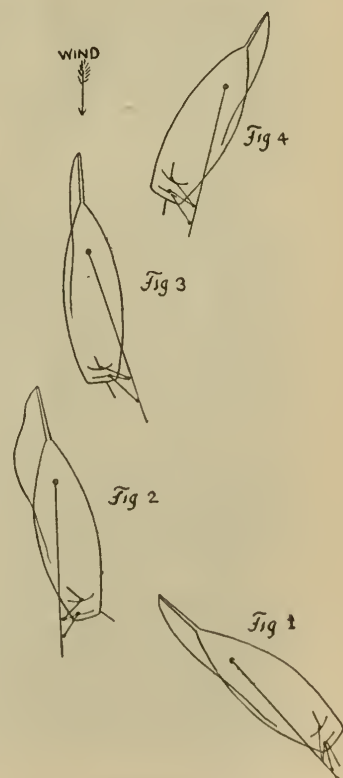
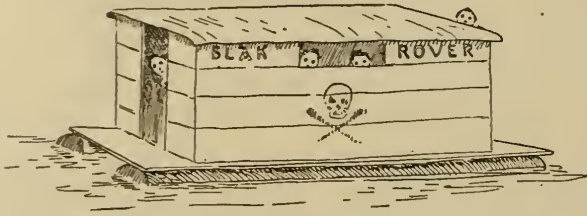


Diagram No. 8.
The Manœuvre of Tacking.

THE PRACTICAL HOUSE-BOAT.

By Charles Ledyard Norton.

CONSIDERING our national progressiveness and our fondness for camping, with its attendant joys, it is strange how slow we have been to adopt the house-boat idea. The average American of to-day does not even know what a house-boat is, and if he goes to the dictionary, he will find the desired information only in the latest and least



abridged editions. Our English cousins, on the contrary, limited as are their facilities for camping, evolved the house-boat something like a generation ago, perhaps taking the Chinese or Japanese as their exemplars, or, perhaps (who shall say?) going back to Noah and his ark as their pioneer. However this may be, their inconsiderable rivers, from the Thames down, their "broads," firths and estuaries, are to a degree utilized as anchorages for these floating houses.

The first house-boat that I ever lodged in was made of rough boards, and stood upon the head works of a log raft up in the Maine wilderness. A bear came on board during the first night of our occupation to investigate our provision stores, and I have always remembered that raft with great affection.

The second in my experience belonged to an oysterman in New Haven harbor, when I was at Yale. We used to row alongside in the old barge *Thulia*, and consume freshly-opened "Fair Havens" on the half-shell in unlimited quantities. The little house contained bunks for the crew, and, even in those days, I thought what fun it would be to own such an outfit, and use it as a summer residence.

Perhaps the most ingenious, barbaric and altogether admirable house-boat in my experience, the "*Blak Rover*," belonged to, or, at least, was occupied by, a certain piratical gang of "wharf-rats" on the Brooklyn side of the East River.

Fortune or enterprise had favored them

with certain flotsam logs, sufficient for a raft, and the result was a structure something like the appended sketch.

The covers of two piano cases had been removed entire, and one of them nailed across the logs for a floor. Upon this the two empty cases were stood up on edge far enough apart for passage between; and then the other cover was nailed on top for a roof, and there floated a house-boat, primitive in form to be sure, but a house-boat for all that, quite as truly as the most gorgeous floating palace.

It is a far cry from the embryo pirates of the East River to the owners of the craft which are making their appearance in increasing numbers from year to year along our lakes and waterways, but take the house-boat idea, pure and simple, and it arranges itself on certain fixed lines. There must be, for instance, in a well-equipped craft intended for fastidious folk, a living-room, sleeping-rooms, a galley or kitchen, storage spaces and a lavatory. In rainy weather, there must be easy access between these, under cover.

The general plan is, of course, capable of infinite variations in detail, which will suggest themselves to accommodate varying tastes, means, and numbers. I confess that I am enough of a barbarian to find myself in sympathy rather with the crew of "*Blak Rover*" than with the owners of the large and costly floating palaces which are the house-boats of the very rich.

Artists in all lands are patrons of the house-boat, and very useful and artistic studios they make. One of these floating summer homes, that of Mrs. H. V. Snead, an artist, is reproduced herewith.

Dragon is its name, and it is thirty-two feet long from end to end and sixteen feet wide, so that all canals and locks and bridges over navigable streams, are practicable for its passage. The studio proper is twelve by eighteen feet and has seven feet head room; it has eight windows and two doors, one of which opens upon the forward deck, and the other to the passage leading aft past the doors of the smaller subdivisions.

A cat-boat furnishes *Dragon's* motive power when a favorable wind offers, and when there is no wind, there is no motive



The *Dragon* Off Island Heights, Tom's River, New Jersey.

power, save such as may be necessary for minor changes of berth in shallow water. At such times setting-poles are in order, and the decks and side gangways are used in effecting changes of anchorage. *Dragon* is provided with a rudder, a most important member when she is under tow of her tender, or is being propelled by the square sail, which she sports upon occasion, using her flagstaff as a jury-mast.

Her roof, or, more properly, her promenade deck, is reached by a steepish stair, and is the place of all others for astronomical observations, including sunset and the various lunar phenomena, and for those gray days, devoid of glare, that are the true artist's delight.

And here, lest I forget it, let me interpolate a bit of advice. I do not know what *Dragon's* deck is covered with, but if not



English House-Boat.—The *Water Lily*.

with painted canvas, it ought to be, for nothing is so surely weather-proof, or so easily repaired should a leak take place through any of the accidents that are likely to befall. None realize the sorrows of a leaky roof more bitterly than those who go down to the sea in house-boats. Therefore, Oh, novice! use stout canvas for your decks, fasten it down with sizeable copper tacks, and coat it over with the best of outside paint, ready-mixed in sealed cans by some well-known maker. The journeyman painter is fain to use poor materials and thin them with turpentine, or some patent drier, till the mixture is worthless for durability. Buy your own paint, then, in sealed cans, and either lay it on yourself, or else exact a solemn promise from your painter that he will

the rains may descend and the floods may come, it must be so well adapted to the situation that it shall remain trustworthy, though essentially unstable; in other words, the foundation must needs be a float of some kind, and a good one.

It is nearly always practicable in the vicinity of a seaport town to pick up some sort of a scow, or a flat boat, at a bargain. If its planks are in the main sound it can be calked and repaired and decked over, and a house can be built thereupon at a total expense of from six hundred dollars up.

A one-storied structure, twelve feet by thirty, and, say, seven or eight feet high, should cost, built to any reasonable design, not far from three hundred dollars. The least costly float would be made of



A Japanese House-Boat.

not thin the contents. He will grumble, indeed, but will yield if you insist. Of course, these remarks hold good for all painted surfaces, but they are particularly important in the case of the overhead deck; and in this connection let me utter a word of warning against the tinned tacks, which unscrupulous dealers will attempt to pass off upon the unwary as the galvanized article. Copper tacks are best, and galvanized ones will do fairly well, but the bright tinned ones will rust more quickly than even the common commercial variety of unadorned iron.

From what has been said, it is evident that a sure foundation is essential, but, unlike the builder cited in Holy Writ, it will not do at all for the house-boat man to set his house upon a rock; his foundation must necessarily rest upon something even more unstable than sand, and though

pine logs, such as are used for piles, spiked together in sufficient quantity, and costing something like two dollars and a half apiece. The number of logs may be reduced and the power of flotation augmented, by securing a dozen or more empty casks between the logs. At this writing, empty oil barrels cost one and a half dollars each, and with a moderate amount of ingenuity, quite a satisfactory float can be constructed with such a combination of logs and casks.

Such a float as this is not seaworthy, but it will serve its purpose in well-sheltered waters, and in calm weather it may even venture to be towed across open bays or harbors from one sheltered anchorage to another.

It is much better, of course, to have a float that will stand something of a sea, or one, at least, which will not be put to its

trumps by a formidable steamboat swell. Preferably, it should be sharp at one or both ends, so that the sea, be it in waves or in ripples, will not pound or tap persistently against a flat surface, to the disturbance of quiet rest, and even to the serious annoyance of people with nerves. A float like this, if built to order, would cost, at a moderate estimate, from eight hundred to one thousand dollars; but, as I have intimated, bargains are to be had at all times in the shape of scows, canal-boats, broken-down fishing-boats, and the like, that have outlasted the purpose for which they were originally designed.

Of quite another class is *Ale-mada*, which was once an eighty-five-foot schooner yacht, now made over into a most commodious steam-cruising house-boat. By virtue of her sea-going lines and her considerable steam power, she is a cruiser properly, and yet can be classed as a house-boat, for her chief end and aim is comfort and elegance in the way of living accommodations; she has a big and well-lighted cabin, and seven good-sized state-rooms—one of them right up in the bows, very large and commodious—bath, pilot-house, and, in short, everything except a high rate of speed, which, after all, would be a virtue misplaced in a house-boat. A party of eighteen can readily be quartered on board.

The St. Lawrence and the Shrewsbury rivers in summer, and the narrow bays and inlets of Florida in winter, are at present the chief haunts of house-boats on the Atlantic coast. On the Pacific, they abound in the vicinity of San Francisco, and in the middle west, indeed, wherever there are populous towns in the vicinity of sheltered waters. Residents on the Pacific coast claim that there the science of house-boating is far in advance of its eastern status.

Englishmen have, for the most part, been content to let their house-boats lie quietly at anchor in the placid waters of their inland streams, but the more restless

American temperament demands some motive power. Steam power, however, with its attendant fires, and heat, and smoke, is objectionable, even on a craft of considerable size. Sails, whether carried on the parent craft, or on her tender, are, at best, uncertain; but within a few



The Dining Saloon of the *Dragon*.

years a host of ingenious devices for utilizing naphtha, gasoline, electricity, alcohol, petroleum, and I know not what else beside, have come into use, and seem to afford just what is required for those who can pay the price; and, upon the whole, they are not very costly, considering the work they do.

It is well known that a given horsepower will tow much more effectively than it can propel. Witness, for instance, a single tug-boat towing a mile or so of big coal barges and making very good time, in spite of the enormous drag upon her cable. A small launch, with any of the improved motive powers named, will walk away with a vessel of twenty times her displacement. Not, of course, against wind and tide, but under favorable conditions, and such are all that a house-boatman ought to expect. With a launch to go marketing, or for the mail, or to call upon neighbors afloat or ashore, the problems of house-boat navigation are greatly simplified without infringing upon the space intended for the accommodation of passengers and crew.

BICYCLING THROUGH SHAKESPEARE'S LAND.

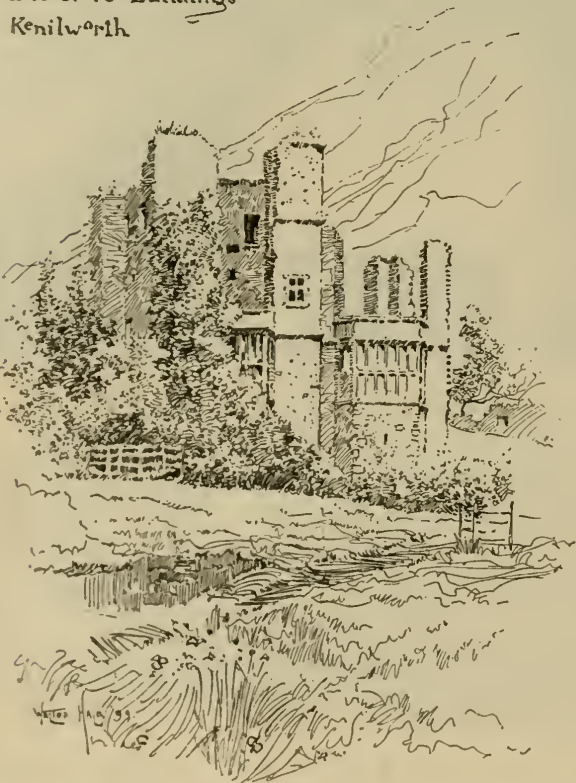
A GLIMPSE OF THE ENGLISH WEST COUNTRY.

By Walter Hale.

With Illustrations by the Author.

A GLIMPSE of the West country is what too many American tourists in England miss. It should never be. Who has not seen at least some part of the west country, be it Gloucester, Worcester, Warwick, Somersetshire or Devon, has missed the most characteris-

Leicester's Buildings
Kenilworth



tic flavor, historical and scenic, of the England of the middle ages.

If you cannot cover much of it, cover what you can, never omit the west country altogether. I had only four days at my disposal, and so I struck west awheel from Coventry, where I detrained straight from a Scottish tour which had ended at Edinboro; and four days of greater interest and wealth of memory it would be hard to find.

A stiff breeze blew the dust and leaves across my path as I pedalled up an incline leaving Coventry town, for Kenilworth; then came a long, level stretch with well-kept hedges on either side, and great trees towering above them. In the distance the sun lit up fields of yellow grain and shone brightly on red-roofed cottages. Now and again an old gray

manorhouse stood out from a background of dark green foliage with shady walks and velvety lawns, and beyond the trees an old-fashioned garden where red hollyhocks rose like British sentinels above the shrubbery.

Beautiful, indeed, is the landscape in a park-like way, with evidences at every turn of great care, but it lacks much of the picturesque quality that so distinguishes the upper northwest of England, the lake country, where the moors are purple in the twilight, and from each hilltop there is a glimpse of wide waters.

There is no ruin in the country fuller of historical interest than Kenilworth Castle, none I had seen more beautiful, with the possible exception of Fountain's Abbey. All of the crumbling stone work, the tilt yard, the courts, and towers, and ruined walls are alive with a thousand memories of the past. Here in all their splendor came kings and queens, great knights and titled ladies, from the time it was founded in 1120, and called Ye Castell of Kyl-lingworth, till occupied by Cromwell's officers in the seventeenth century. These vandals dismantled the ancient keep and court, drained all the surrounding lakes, wrought havoc with Leicester's buildings and the towers, and did their best to start the ancient pile on its course toward ruin and decay.

That there is enough of it left to convey some idea of the early splendor is due, in a great measure, to Sir Walter Scott, who revived interest in Elizabeth, Leicester, Amy Robsart and Sir Richard Vane, and their connection with the history of the place. Through him the decay was stopped, and now the grounds, from the gate-house in and out among the courts and buildings to Mortimer's Tower, and over the path Elizabeth took when she came from Warwick, are like a well-kept park.

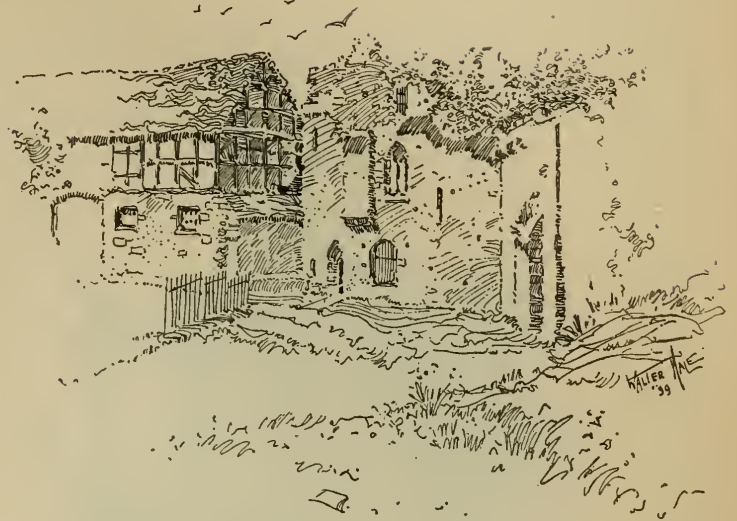
The ancient moat is partly hidden by the shrubbery and long grass waves by the little bridge, while above rise the walls of Leicester's building, red and brown in the sunlight, their empty windows adding to the look of loneliness and abandonment.

Across the base court stands the water tower, and above that are grated windows cut deep into the stone, admitting slender rays of light into what was once the Queen's chamber. The relics of an ancient wall, fringed with weeds and rank grass, runs from the tower on one side, and Leicester's stables, modern by contrast, flanks the other.

The approach to Warwick from Kenilworth is beautiful; the town lies hidden behind masses of heavy foliage, and above it rises St. Mary's Church and the towers of the Castle. A walk cut in the solid rock, and overhung with creepers and trees, leads from the street up to the outer court, and I almost finished a sketch of Caesar's tower from this viewpoint before a porter informed me that drawing the buildings was expressly forbidden. Arbitrary rules of this sort are common in Germany, and on the frontier of France; here in the heart of rural England they seem sadly out of place.

But my resentment was forgotten when I looked over the landscape from the top of Guy's Tower, where the view well repays one for the long climb up the spiral stairway. Miles upon miles of Warwickshire countryside stretch away in every

Stables and Water Tower
Kenilworth



direction. On the one side is the town, with its church spires and gabled roofs, on the other a beautiful park dotted with trees, and with a glimpse of the shining Avon as it flows quietly toward Stratford and on to the Severn. At one's feet are the Castle buildings; the old fortifications and walls surround an inner court where peacocks show off their gorgeous plumage on the lawn. From this vantage point the roar of the weir seems hushed, or is muffled by the echoes from the courtyard and the murmur of the village.

From the stone veranda overhanging the river another view of startling beauty greets the eye; above are the remains of an old mill: and a ruined bridge, covered with ivy and creeping plants, stands against a background of Scotch fir trees outlined irregularly in the water below.

As the afternoon wore on, I rode out by High street, past Leicester's hospital and the west gate of the town, and on through the gathering twilight.

It was dusk when I entered Stratford, but not too late for dinner at the Unicorn. Later, I strolled along the river bank, and loitered for a while on the bridge over the shining river, as the irregular sky line of the village faded into night.

The lights in the town twinkled and went out, one by one, except where loud laughter came through some open doorway. The elms on either bank took on weird shapes, while straight and clear the spire of Trinity Church rose above the trees and houses, and was reflected in the dancing ripples at my feet. Then to my

Caesar's Tower - Warwick



Stratford Church



room beneath the eaves I stole, with a proper feeling of awe and reverence.

Early morning found me in the churchyard, where the trees cast long shadows across the moss-covered tombstones, and the terrace rises above the river and looks out toward the opposite bank and over the meadows beyond.

In the effort to restore and preserve Stratford Church, some of its Old World quaintness has been lost, but it is still an impressive example of the architecture of its Norman and Saxon builders. The original structure, altered and added to from time to time, has stood on the banks of the Avon for six or seven centuries, and the historic graves in its chancel, the time-worn tablets on its walls, and the aged elm and yew trees in the yard, vie with each other in preserving its atmosphere

of venerable and extremely interesting antiquity.

The old Guild Chapel stands in Church street, and beneath the shadow of its tower is the grammar school founded by Edward VI., made famous because of its association with the days of Shakespeare's youth. The chapel was a Roman Catholic institution, and dates back to the thirteenth century; the school building is singularly picturesque, the quaint brick and timber walls have been cleared of their early coating of plaster, and the diamond-paned windows peep out from beneath the shadow of the overhanging roof. Inside, in the council chamber, an early fresco has been revealed representing two large roses, placed there probably to commemorate the ending of the War of the Roses in 1485, and here is the schoolroom where Shakespeare's desk once stood. The schoolmaster, Walter Roche, lived in a cottage back of the chapel, long since destroyed, and across the street, foundations only, represent all that is left of the ancient mansion where Shakespeare spent the last years of his life, and from whence his body was carried to be buried in Holy Trinity Church. It is monstrous to remember that the house itself was wilfully demolished by a clergyman to avoid the payment of taxes to the town.

The Birthplace ~
Stratford ~

All this is history, some of it vague, perhaps, but even so, the buildings are sufficiently interesting in themselves; the

grim old tower of the chapel, rising high above the narrow streets, has an imposing dignity quite in keeping with its past, the buttressed walls are blackened with age, the mullioned windows look out over the sloping housetops and chimney pots, and cawing rooks fly around the belfry.

I followed a procession of carriages out Henley street, and they all stopped, as I had expected, in front of the Birthplace. The house has a varied history. It has been rebuilt and changed from time to time, one part became an inn, called first the "Maidenhead" and then the "Swan," and part of it was occupied by a butcher. It is now a national museum under the guardianship of a board of trustees, and is filled with a hundred relics directly connected with Shakespeare and his time.

Through narrow, twisting streets I rode out of Stratford and on into the country. Of all the relics in this historic neighborhood, Anne Hathaway's cottage, in the tiny hamlet of Shottery, is to me the richest in sentiment, and the most attractive in its Old World memories and rural beauty. The thatched roof rises above the hedge on the left of the roadside, hollyhocks, pink and white, glow in the garden, and purple clematis hangs over the low doorways. The children who swarm into the highway with a flower to sell, or to chatter and romp in the sunshine, seem part of the rustic picture.

The low ceilings, the open fire-place and cozy chimney-corner, the beams of rugged oak, all are typical of the simple architecture common among the English farm houses that date back to the days of King Henry VIII.

From the garden, where the roses and vines straggle in artistic disorder, the old place has just the right appearance of wildness and hoar antiquity. Beneath the eaves, half hidden behind the thatch, are four small windows, with leaded panes; long shadows fall athwart the timbered walls and are broken by masses of tangled ivy; above, a column of smoke curls up into the air and is lost against the sky, or merges into the dark green of the protecting elms beyond.

Toward evening the sky darkened, the clouds piled one on the other and threatened a heavy storm, so I was doubly glad when a turn in the road carried me into the open, and a short distance beyond the spires and housetops of Broadway came

~ GUILD Chapel and EDWARD VI School ~
STRATFORD



into view above the meadows. After turning and twisting through the outskirts of the village, I came to the main street and reached the hospital doorway of the Lygon Arms just as the storm broke.

In the cosy, well-lighted coffee-room I could afford to sit back in a comfortable chair and laugh at the downpour without, while the windows rattled, and the old sign creaked and groaned in the gusts of wind. This sign, by the way, is characteristic of the ancient hostelry; it hangs at the top of a high pole in front of the building, and is held in place by curling iron supports, with a decorative finial above. The date 1620 is over the enriched doorway, and the Lygon Arms, with its ivy-covered walls and pointed gables, is a most picturesque and aristocratic-looking country inn.

Broadway must have been named from its wide main street, which has a plot of greensward running up and down the middle of the road, like one of our western boulevards. The houses on either side present a broken, uneven sky-line; dormer-windows, quaint gables, high chimneys crowned with pots of different sizes and colors, and dark, red-tiled roofs, mottled with bits of moss near the eaves, completing the Elizabethan effect. No wonder Abbey spent much of his time here



Street in
Broadway-Worcestershire

while making his admirable drawings of the Shakespeare comedies, and F. D. Millet, John S. Sargent and Mary Anderson-Navarro have each assisted to attract attention to this sleepy Worcestershire village.

Late in the evening the sky cleared, and I walked out into the highway where a crowd had gathered about a canvas-covered wagon. A hawker, whose stock-in-trade ranged from needles to chromos and bed-room furniture, was trying to auction off his wares beneath a flickering gasoline lamp, and his quaint costume and thick Lancashire dialect were the best part of the show. The echoes of a band of music floated down with the breeze, and I followed the sound through by-paths and winding lanes till I came to an opening beneath the trees, where a great part of the younger population were dancing on the green. The children diverted themselves by dodging in and out among the dancers, and the musicians, who were dressed in the uniform of some

volunteer regiment, seemed to have no hesitancy, when a mug of ale appeared, about dropping a trombone or a cornet in the midst of an air.

* * *

The dimity curtains in my bed-room

a Ye Lyon Arms a
Broadway



blowing about in the morning breeze, and the sun shining on the sunken floor and black oak beams, awakened me to the

fact that I must be up and pushing on toward Cheltenham.

The ride to Winchcombe through the Vale of Evesham was simply charming; the road leads into a beautiful pastoral country, now through an alluring glade where the hedges are thick with sweet-smelling wild-flowers, then past fields of yellow grain, bordered with the crimson glare of poppies, or over an old stone bridge, with a gurgling stream beneath, half hidden by the underbrush. And ever ahead, sweeping toward the horizon, are the purple outlines of the Cotswold Hills. Orchards, with the fruit ripening on the branches, well-tilled fields where the plow-horses were resting in the noon-day sun, all were passed quickly, and I was soon jolting over the cobble-stones in the narrow streets of Winchcombe.

The George inn offered refreshments of all kinds, but I particularly remember a large and juicy gooseberry tart that finished the luncheon. The bells in the place were ringing noisily, and the shops were deserted, because a wedding was taking place in the old gray church.

A bridge took me across the Avon, then followed a long, level road, that ended in a perceptible grade, and I was soon pushing up the steep, winding highway that leads on through rocky pastures, and finally crosses the summit of Cleeve Hill, in the Cotswolds.

At the far side, after the crest is reach-



~ Gloucester Cathedral ~
from Oxbody Lane.-

ed, set back beneath the trees, is a small inn, appropriately called the Rising Sun, and the view from here was most grateful after the long, weary climb up the ascent, for the day was unusually hot for England. Far down in the valley, hidden at times by clouds of dust, are the shining spires of Cheltenham, and in every direction is a beautiful panorama, with long stretches of verdant meadow-land, fields of ripening grain, red-tiled roofs, with columns of blue smoke rolling out of the chimneys, and through the dark green foliage the glint of the river winding on toward the sea.

I had no occasion for the healing waters of Cheltenham, so I made my stay a short one, and was soon on the straight, level road leading southwest from the city, with a strong wind in my favor.

Far ahead in the distance, above the meadows, rose the Gothic spires of Gloucester Cathedral, its outline soft and indistinct in the haze. As I drew nearer, the lofty towers seemed to command the city and all the surrounding country as well, from the Malvern Hills on one side to the Cotswolds on the other.

Off the main street, and through an archway beneath a row of unpretentious business houses, is the picturesque courtyard of the old New Inn, one of the



Ye Olde
New Inn
Gloucester



A Street
Winchcombe

few taverns left in England with a Pilgrim's gallery running around the second story. The posts and arches are covered with clinging ivy, while potted plants and flowers stand on the ledges, and the bright effect is heightened by the well-scrubbed stone flagging, and a mass of geraniums near the stairway. It was after sundown when I rode into the courtyard and secured accommodations for the night; the "boots" was lighting the big lamp hanging over the sign-board, while the maids were scurrying from one doorway to another, and the place was alive with people coming and going from the noisy street without.

An old print hangs in the coffee-room, and from it one can get an idea of the inn in former days. It has been altered and restored, but with a laudable effort to preserve its early atmosphere of quaint antiquity. And little wonder, for it was built nearly 450 years ago, to accommodate the pilgrims to the tomb of King Edward II. It was then the "New Inn," in deference to some more ancient hostelry, and the name, and to a great extent its appearance, remains unchanged.

The Cathedral is Gloucester's chief ornament, and the great connecting link between the modern city and the early days. In the cloisters, in the Norman crypt, and beneath the vaulted transepts of the ancient abbey, are a hundred relics directly associated with England's early history.

A drizzling rain set in late in the afternoon, I had seen something of Gloucester with its striking contrasts where the new world jostles the old; where some ancient house with dormer-windows and a gabled roof leans for protection against an example of our latest modern architecture. In four days I had ridden through Warwickshire and Worcestershire to Gloucester, the weather was disheartening, and the rain seemed destined to stay, so I packed up my kit and was soon looking through the friendly windows of a railway carriage, over a blurred and misty landscape, but time will scarcely efface the panorama of those days while memory retains its function.

NAVIGATION FOR YACHTSMEN.

By W. J. Henderson.

SOME years ago, it is not necessary to say how many, I was cruising on a certain sloop yacht. We lay in a harbor, which shall be nameless (for names lead to identifications), and were to sail in the morning for another port; that being the manner of cruising yachts the world over. There was a young moon in the western heavens, and a light breeze out of the direction in which lay our port of destination. Winds in such directions are apt to evoke improper language from skippers, so when the brass-buttoned gentleman, who gave the sailing orders on this particular craft, came up the com-

panion-way audibly grumbling, I thought nothing of it. But he walked up to me, and said:

"That's a sweet run we've got to make to-morrow."

"A very sweet run, indeed," I answered, with all the civility I had on board.

"Seventy-six miles!" he snorted.

"Oh, I think not quite so far as that," I replied, with some confidence.

"Why," said he, "I've just measured it on the chart."

"That's rather curious," I responded, "for I did the same thing myself a few minutes ago, and made it fifty-four miles."

"Well, it's seventy-six," he declared, with the air of one in authority.

I then cordially invited him to come below and show me how he made it, and the owner of the yacht confessed that he would like to see us reconcile our difference of opinion. So we went below and the sailing-master proceeded to lay off the distance on the longitude scale at the bottom of the chart, a method which was never right on sea or land. I complimented him on his ingenuity in augmenting distances, and then proceeded to teach him how to measure courses on a chart, with the result that the owner of the yacht, amazed at the ignorance of his captain, asked me to take charge of the navigation for the rest of the cruise. I need hardly add that the yacht went faster after that, as she did not have to account for quite so many miles a day, and she left port more frequently than she had previously done when runs seemed to be too long to make in a sailing day without more wind or a fair tide, or some one of the other things which anchor-loving sailing-masters need before they are willing to get under way.

This story teaches us that the owner of a yacht should always know navigation. Other things also teach it, but it is an undisputed fact that the ignorance of navigation on the part of yachtsmen leads to a considerable amount of imposition by skippers. Furthermore, I have read somewhere, I forget where, that a yacht owner can never hope to sail his yacht better than the professional sailor, but he can hope to beat him at navigation. This is a fact. It is a real joy to see how easily an intelligent man gets hold of the practice of navigation. And he is always ready and willing to pursue the study to the end, and to master it, while the average skipper is content with a little rule-of-three work, just enough to carry him from port to port. Few have any idea how many chances are taken at sea in navigation. For instance, Capt. Howard Patterson was once called as an expert witness in a suit of a discharged captain for wages for the remainder of the season. The defense was that the man was incompetent, and had proved himself so by piling the yacht up on a rock off the San Domingan coast, when he supposed himself to be more than fifty miles away from it. Capt. Patterson examined this

gentleman's log, and found that in sailing due south, on a line of no variation, he had changed his longitude more than a degree to the eastward. And yet this fellow had the audacity to ship as master of a seagoing yacht, bound for a cruise in foreign waters! Another skipper, showing me the chart of a cruise of a friend's yacht among the Windward Islands, pointed to his position by dead-reckoning one noon, and said:

"I thought that was where I was, but when I got the sun, I found I was away over here."

And he pointed to a position some thirty miles away. I asked him if he had not been able to get any stars in the early morning to give him a better fix, and he answered, with a distant look in his eyes:

"I don't never use no stars."

I learned that this man, who had been a lime-juicer from boyhood, and had been master of an ocean steamer, knew only two sights—the sun at noon, and at nine o'clock in the morning. He could not take an "ex-merid," nor a sunset sight, and knew nothing about the use of the stars, and was totally ignorant of the existence of Sumner's method. He could not take an azimuth for deviation, and he was unacquainted with great circle sailing. Nothing serious had ever happened to him, because he had had luck. He had made some pretty wild landfalls, but that was about all. I am confident that any yachtsman will agree with me that it is much better to be one's own navigator than to take chances with half-educated skippers. The sailing-master can sail the yacht better than the owner. There is no question about that. But the owner can, after a few months of attention to the subject and a reasonable amount of practice, give the average sailing-master cards and spades at navigation. And if the owner chances to be a good Corinthian, the time is not far away when he will be able to take the entire command of his yacht.

And think of the comfort of it! I do not need to tell yachtsmen of the tricks of skippers to avoid doing the work for which they are engaged. There is no news in the statement that if the sailing-master has his way, the mud hook will seldom rise from the bottom of the deep. But let the owner demonstrate to his captain that he can sail his own yacht fairly,

and navigate her excellently, and from that instant the skipper is what he ought to be—the owner's humble servant.

Now, there is no copper-bottomed mystery about the art of navigation. It is not a thing that is incomprehensible to all but skilled mathematicians. I have frequently been surprised to find that men thought that only one who could construct his own logarithms, and was a past-master of spherical trigonometry, could be a navigator. It never seems to have occurred to these gentlemen that if their idea of navigation was the correct one, it would be something entirely beyond the reach of the captain of a collier or a coasting schooner. The truth is, that in order to become a navigator one has only to know how to handle decimals and compound numbers, and any man can do that much. The mathematical part of the subject is easy. Of course, it is a good thing for a man to have studied geometry and trigonometry, for a knowledge of these subjects will make comprehensible to him many things which otherwise he must take on faith. But he can learn to navigate his vessel without any heavy cargo of mathematics, and in the picturesque language of the day, get there just the same. The trigonometrical data requisite to the solution of the problems of navigation are all worked out in the tables found in the epitomes. All that the navigator has to do is to know out of which tables to pick certain figures, and after that it is only a matter of addition and subtraction.

That is all of the mathematical mystery. But, of course, the computation is only a small part of the work. A good navigator must thoroughly understand the theory of the science. He must know just when and how to use the different kinds of sights in order to get the best results. He must not only know that the sun or any other heavenly body will give him the most certain longitude when it bears directly east or west, but he must know why. He must not only know that he must take the sun for latitude when it bears due north or south of him, but he must know the reason of the operation. To get at the theory of navigation is not at all difficult. Any intelligent man can learn it without trouble, and the process of learning is simply fascinating. This is not merely the declaration of an enthusi-

ast, which I confess to being, but a statement founded on the observation of many men in the act of studying this charming part of the seaman's calling.

How can the yachtsman learn navigation? Well, he can go to a teacher, if he so desires, or he can work the thing out for himself with patience and a little help. I have never known a man to make a successful navigator of himself without any help, because there are some few points, especially in the management of the sextant, that need illustration. The man working by himself never knows when he has these things right. As for text books, there are several. I need not name them, but I must caution the student to let the big epitomes alone. They are not for him. Bowditch's "American Navigator" is useless to any one but a skilled mathematician. The tables contained in this, the standard American work, can be bought separately under the title of "Useful Tables." With these tables, a nautical almanac, a text book, and his charts, the student will be equipped with sufficient printed matter. He will need also a sextant, a pair of parallel rules, a pair of dividers, a protractor, and for sea work a chronometer. I am presuming that his yacht is equipped with a lead, a log line, and a compass.

This article cannot pretend to lay down a course of study, but, perhaps, it may not be amiss to offer one or two suggestions. Put the sextant and the chronometer away till you have thoroughly mastered dead-reckoning. And before you attack dead-reckoning make sure that you know all that can be known about the information to be obtained from a chart. In clear weather you can sail the whole length of the Atlantic coast-line of the United States with a chart, a log, a lead, and a compass. Make up your mind that you have learned all that before you undertake to go any further. Now, dearly beloved, you cannot learn all that out of the book. The book will tell you how the different things are to be done, but, when you come to do them in practice, you will find that two things will trouble you—the ship won't wait for you, and the fellow at the helm won't keep her straight. While you are trying to locate your yacht by the position of certain objects on the shore, the yacht will run so far past these objects that by the time you have your

position marked, you will need a new one. And if the helmsman does not keep her on a straight course, your second bearing will not have the true relation to your first one.

Do not let such things discourage you. What you need is practice, plenty of practice. In working along a coast everything has to be done pretty quickly, especially if you are close to it. To work expeditiously requires a dexterity, and a mental speed which can be acquired only by familiarity with the various processes, and this familiarity comes only with experience. In the very beginning the navigator must make himself a past-master of the compass. He must have the rules for correcting compass courses and bearings for deviation and variation at his fingers' ends. He must be able to apply them without stopping to compute. He must perform the processes mentally, and he must always perform them right, or else he will get into trouble. Now I have no hesitation in saying that the solution of compass courses is the most confusing, and, therefore, the most difficult thing in navigation. It comes right at the beginning, but when it is mastered the comfort of the navigator in dealing with the subsequent problems of dead-reckoning is something that can only be imagined. I have seen students of navigation, who had advanced beyond mere chart work, struggling hopelessly in the mazes of working out the course to be sailed from a given position to a new latitude and longitude, and all because they were not thoroughly sure of the rules for correcting courses. Yet this is a thing that comes up every time you shift your helm.

After you have thoroughly learned chart-sailing, then master dead-reckoning. Do not allow yourself to fall into an error, by no means uncommon, that dead-reckoning is not of much value. To the yachtsman it is of especial use, because he is more likely to have opportunities for its employment than for that of observation. Here, again, I can not too urgently proclaim the need of practice. Dead-reckoning is often called, and with justice, a stupid old pilot. Its results are so easily affected by insidious errors that only the man familiar with the conditions under which mistaken calculations are likely to creep in can avoid serious misfortune.

These fundamental parts of the science being at one's fingers' ends, he may attack the work of fixing the position of the ship by observation. And here let me caution the student about one or two things. Do not let any one, no matter who he may be, persuade you to burden your mind with every one of the formulas to be found in the epitomes of navigation. Do not permit some smart naval officer to put you to the blush by making you confess that you don't know how to work latitude by double altitudes, or longitude by lunars. Learn the subject in such a way that you can tell him flatly that the man who uses such worn-out methods is an ignoramus and does not understand the theory of navigation. When you can take a meridian altitude of the sun and a star, and also an ex-meridian altitude, and know the use of the Polar star, you will have all the latitude you need in your business. Equally when you can take a chronometer sight of the sun and a star, you will be pretty well off as regards longitude. It is well to learn, also, the method by a sunrise and sunset sight. It is infrequently used, but the chances are that when you want it you will want it badly.

When you have learned these methods, give yourself up with all your heart and all your mind to the Sumner method. By the Sumner method one gets his latitude and longitude and his deviation all out of one problem. And the thing is capable of so many and such various applications that there is hardly any situation in the experience of the navigator to which it cannot be applied. For example, the old-fashioned way of making the noon position of a ship at sea is this: Take a chronometer sight of the sun in the morning. Do not work it out, but set it aside till after you have your latitude at noon. Then work the latitude back to the time of the morning sight and with the resultant latitude compute the morning longitude. Then carry the longitude forward by dead-reckoning to noon, and thus you have the correct latitude and longitude of the ship at that time. If you are a smart worker, you can get this job completed in about three-quarters of an hour. If you are a little slow at figures, it will take an hour.

Now, by the Sumner method, one uses his latitude by dead-reckoning for working out the morning sight as soon as the

altitude is obtained. From his result he constructs in about five minutes what is called a Sumner line of position. When he has obtained the noon latitude, he simply measures on the chart the course and distance sailed since he made the line of position and rules another line parallel to the first. Where this second line cuts the noon parallel of latitude, the ship is at noon. This computation can be completed in ten minutes after the noon altitude is obtained, and it is quite as accurate as the old-fashioned way. Yet the local inspectors are still requiring candidates for the master's license to work the thing out in the primeval style. The Sumner method is of the greatest value in approaching a coast. The results to be obtained from an intelligent application of it are indispensable, and I would heave overboard at once any treatise on navigation which did not discuss this topic very fully.

Finally, let me repeat to the yachtsman that there is only one way to become a good navigator, and that is to keep practicing all the time. Use your sextant constantly. Learn to take the angular height of lighthouses with it, and to compute from this the distance of the ship from them. Learn to measure horizontal angles with it, and to ascertain from them the distance of your vessel from certain known points. Familiarize yourself with the methods of taking cross-bearings and bow and beam bearings, as you run along any line of land. If you find that at first you cannot take bearings fast enough to help you as the yacht passes the land, heave your vessel to; or, if she is a steamer, stop her. Never mind the smiles of your self-satisfied sailing-master. He will be walking on his hands and knees before you in a few months when some night you work a time-sight of a star.

And when you come to practicing observation work, do so in known positions. If you are running into Newport near noon and find yourself abreast of Beaver

Tail at twelve o'clock, shoot the sun for latitude. You will find the latitude of the light on the chart, or in the lighthouse list. See how near you can come to it. If you are passing Point Jude about nine o'clock on a clear summer's morning, when the point bears due north of you, and your longitude should be the same as that of the light, take a chronometer-sight of the sun. You will find a good sea horizon to the eastward. Work out your sight and see how near you come to the real thing. If you are not correct, you can ascertain the reason. If you try to practice at sea, out of sight of land, you will not know whether you are right or not. By practicing in known positions, you will acquire an absolute certainty about your work and a confidence in yourself which will be worth millions to you in the time of need. Do the same thing with your dead-reckoning. Keep it in clear weather and along the shore. You can tell precisely how much and of what nature your errors are, and thus learn to avoid them in the future.

And buy good instruments. A cheap sextant is not worth the trouble it takes to heave it over the side. A cheap chronometer is the biggest liar on earth. A poor compass is worse than a bunco-steerer. The first outlay on these things is the largest. But it is a good investment. It will save you a lot of money in the end. When you have your good instruments and have learned how to use them, go down to the local inspectors and take out a license to command your own yacht. Then, when you go over the side and set your foot on your own quarter-deck, let it be understood that there is just one captain on board of that ship, and that he will nominate the hour when the mud hook is to come up, and will also give out the course and the daily noon position of the ship. After that you will feel like a man who has just come into a fortune and moved out of a fourth floor furnished room into his own house.





THE ISLAND OF DELIGHT.

CAMPING AT THE CITY GATES.

By Lenore M. Lybrand.

WHEN one realizes what one has desired all one's life there is bound to be either happiness or disastrous disappointment. Teddy and I, all our lives, had wanted to camp out. After a pretty thorough experience, we are quite ready to pronounce unreservedly in favor of happiness.

As the summer days grew hotter the longing to be out of doors and free from the usual every-day exactions of business and housekeeping became irresistible. The desire was to be free from restraints of all kinds—not to make a simple change from house to hotel.

One evening Teddy came home with the light of a bright idea beaming in his eye, as he announced:

"I saw, from the train to-day, a little island in the Schuylkill River that would be just the place for a camp."

A preliminary trip was made to the island. A party of campers had just left it, which seemed to prove its fitness for our purpose. A boat was engaged for the time we expected to go, inquiries made

concerning the ownership of the island, and lumber for the floor of our tent was engaged to be on hand for us when we arrived.

A few evenings later the purchase of a government tent was announced, and then plans were made in earnest. A coal-oil stove was the next purchase; then inexpensive blue and white dishes in the willow pattern were bought, and a tin tea kettle. All other supplies were taken from home.

We were going out camping for the first time by ourselves, in a strange place; yet we rather ran away from advice than sought it. We knew what we wanted to do and we did it.

When we shipped our baggage the day before we ourselves started, it consisted of seven pieces: three small store boxes filled with eatables and cooking utensils; a steamer trunk with things to wear and incidentals, amongst the latter being a large amount of excellent literature—that remained in the bottom of the trunk; two couch mattresses, which he thought we should prefer to cots, the bed clothing, and a saw packed nicely between them; a folding table with camp stools and hammock, and one or two rugs wrapped around, for the floor of our tent; lastly, the tent itself and the poles.

We wore our bicycle suits and soft felt hats. We made an early start, so that we could get the tent up and ourselves settled before too late in the afternoon.

When we left home we permitted ourselves three anxieties: The island might be occupied by some one else, our goods might not be awaiting us, and we might be overrun with mosquitoes.

None of our imaginary troubles came to pass.

THE ISLAND.

The island is in the Schuylkill River, half a mile below the station at which we alight, and is to be reached only by boat.

As we approach it, it looks like a huge clump of trees rising straight out of the water. The northern end, on which we encamp, is all wooded to the water's edge, the trees nearest the end looking ragged and weather-worn.

The southern end of the island has the appearance of a bit of rich tropical landscape. Call the tall sumacs, palms, and the tropical picture is complete. Growing over all, high and low, a tangled wilderness of wild cucumber climbs and wanders, throwing out sprays of flowers and delicate tendrils, and at dusk its delicate odor makes the air heavy with perfume.

No one lives on the island, and we are the only occupants while there. Our very isolation gives us a feeling of security that we should never possess were we encamped on either bank of the river.

We are delighted with the landing. There is a broad, shelf-like slope of hard soil that dips into the river, and from this the bank rises precipitately ten feet. Into the bank steps have been cut by the former campers. A tree grows out over the water, with half of its roots exposed, and these, as they turn and twist, are utilized to chain the boat to. Another of the gnarled roots makes a comfortable seat.

Going up these steps—and how often we go up and down the following week—we find ourselves high above the water, and able to command a fine view of the east and west banks, and of the river as it comes from misty blue hills to the north.

A space several hundred feet square has been cleared of the coarse grass that grows from two to three feet high. This, brown and dry, makes an excellent cover-

ing for the slightly damp earth, although the mornings are quite free from the heavy dews we have been having at home.

We are on the island. What we have been dreaming of for weeks has become a reality. Now it behooves us to get to work.

MAKING CAMP.

Teddy begins immediately to lay the floor, while I proceed to unpack. He soon finishes it and raises the tent, doing everything in a neat, workmanlike manner, with the enthusiasm of a boy over his first chest of tools. Indeed, enthusiasm is one of the prime requisites for such a camping out as ours.

"This is what I love," he says, as he saws and hammers and nails. There had been a preliminary tent-raising in the storeroom at home, to be sure that everything would be in order at the critical time, so now, the floor laid, the tent goes up without a hitch. Teddy's face glows with the exercise.

After being unpacked, two of the boxes have stiff manila paper tacked over the outside. Inside, Teddy fits them with shelves. One holds the blue-and-white dishes and everything that pertains to the table; the other holds all the cooking utensils, and is, moreover, the stand for the coal-oil stove. Blue and white curtains are fastened in front of these boxes.

Then the mattresses are unpacked, and, covered with a striped blue-and-white cotton curtain, make a luxurious couch during the day time. This is placed against the closed end of the tent. On the left is the steamer trunk, also with a blue-and-white cover. We never knew the manifold uses of a steamer trunk before we camped out. In the open space in front of the couch is room for one table (which folds up when not needed), and on each side we can sit on our camp stools. Thus the space in our seven-by-ten tent is comfortably filled, not crowded as long as we are content to sit still.

The next step is to build, in front of the tent, a platform three feet wide. On this, except when it rains, I cook, and here we eat. During all the time we are away we eat only two meals inside the tent.

Everything is in its place and out of sight. Blue prints of gala days are pinned around the tent, and we admire our handiwork amazingly.

OUR SOURCES OF SUPPLY.

We soon find that camping out gives wonderful appetites, and the question of supplies is next taken up. It is great fun to get them day by day, except meat, which the butcher comes with twice a week. After breakfast every morning Teddy goes away in the boat with a large market basket. In it are four quart jars which he fills with drinking water at a famous well; at the hotel in the village he gets ice; at the country store, bread, butter, coal-oil and our mail, and then he goes for the vegetables.

In rowing along the river we had noticed a very rich garden, and we stop at the very dilapidated yellow house and inquire whether they have corn to sell. We are answered in the affirmative by a child of eight, who is mothering two younger children, one of them a tiny baby. Tomatoes and lima beans, too, are for sale, we are told. We suppress our joy, and go staidly away with our treasures, and when we eat them in camp it does not lessen our happiness to find that the corn is genuine shoe-peg, the tomatoes of the variety known as beefsteak, and the lima beans young and tender, like Little Billee.

Then there is another place where we go for our eggs—gathered while we wait. All this can be attended to in the morning.

Strange as it may seem, milk was the hardest thing to get. Cows grazed daily on the eastern and western banks. Cows everywhere, and not a drop of milk to drink, we soon paraphrased. At last, however, we find our milk supply.

In the afternoon, when it grows toward sunset, and the soft evening glow envelopes the far-away hills, we get into the boat and row across the river to the eastern bank, follow a path through a heavy sapling undergrowth, clamber over the railroad, and turn into a long, green, grassy lane lined with trees that interlace at the top. To the right the setting sun grows larger and larger. Our lane goes steeply up hill, and we walk almost sideways in order not to lose any of the glorious view.

Just at the top of the hill we come to an enchanted house which gives forth milk still warm, and apples; and we go along out into the melon patch and help select the musk melons that will taste so delicious the next morning. This is the

first time we have really eaten musk melons. We have discarded cantaloupes.

We start for home with our treasures. When we reach the lane the sun has just disappeared, leaving golden clouds as a legacy, and we stand and breathe in the perfumed air and watch the valley spread below us, and the river as it winds along, and the little island in the river, with just a white speck at one end that it seems absurd to call our tent, and we wonder why men build cities to live in.

We go past the corn field that looks so cool and crisp and glossy, and down the lane, and as we row over the river the first stars come out. Darkness will soon envelope us and our island.

IMPROVEMENTS.

After necessities had been provided for, Teddy began to exercise his mechanical genius. There is a vast amount of pleasure in making things that are to have a real use, and yet have the charm of novelty about their manufacture. We miss little conveniences, and Teddy begins to plan to supply them.

First, he digs a deep hole and buries all the broken glass and rubbish that cannot be burned. This was a legacy from our predecessors. Next he makes a fireplace. First comes the broad, flat stone several feet square, that he had appropriated (mentally) to this use the moment he saw it. The front extends six inches beyond the fireplace proper, and makes a capital hot-plate rack. If there is one thing above another in camping out that Teddy loves, it is making the fire every morning. How the buttonwood bark does burn!

Where shall we keep the ice? He makes a refrigerator. That goes into a very short sentence, but a great deal of work lay behind the operation. First, to select a spot where the sun would not shine all day; then to dig a deep hole (and digging is hard where so many roots have to be chopped away), and line the bottom with pebbles from the shore. Our third box was utilized for this chest. The middle board in the bottom knocked out, and slats nailed across the open space; then little wedges put round the inside edges of the bottom board—all this to insure drainage. The lid was the most complex arrangement. Two buttonwood crotches furnished the handles. The buttonwood twists itself into so many queer shapes,

Teddy would have had all sorts of rustic appliances if we had stayed there long enough. These were nailed on, and pieces of wood nailed round the side. Then the top was covered with sand and dampened, which made it so heavy that there was no danger of its blowing off, or of any of the small animals on the island being able to push it away. This served admirably for our water, milk and butter, and we left it behind us regretfully.

A DAY IN CAMP.

The first night we were on the island the trains wakened us at intervals, but after that they seemed companionable. It is amusing sometimes to hear the freight trains go along slowly and cautiously, for all the world like a crowd of angry, protesting humans, as though they were scolding the engineer for not letting them go at full speed. Especially did this seem so, after a freight train had been side-tracked to let one of the brilliantly-lighted and dashing passenger expresses pass.

Teddy gets restless at six-thirty and gets up first. Being August, we have hazy mornings, but very little dew. The dried grass beneath our feet makes the best kind of a carpet. I get the breakfast very leisurely. There is no train to make; no watch need be consulted while Teddy eats; no paper to read; nothing that *must* be done at a certain time. We eat because we are hungry; we have our musk melons first, in front of the fire. Soon the bacon and eggs and coffee are ready. How good it all is!

Teddy goes into the forest to where a fallen tree lies and cuts the day's supply of wood. Then he goes to the village for mail and whatever supplies we may need. meanwhile, I air all our belongings, brush out the tent with a broom of freshly pulled twigs, and have everything in order by the time he returns—about an hour later.

We have the constant whirr and chirp of insects; birds are twittering and whis-

ting all around; gaily colored butterflies fly past, then come back to inquire what new settlers have come into their domain: insect curiosity is very much like the human variety, more diverting, perhaps, and certainly more easily disposed of if it becomes too troublesome.

We did not bring wooden plates along, as we were advised to do, because we thought we should not enjoy eating off of them; consequently there are dishes to be washed three times a day. It is surprising what an effective dishpan a deep hole in the river makes, scalloped out of



After the Thunderstorm.

hard mud; and how much cleaner the water is in small quantity than it looks in bulk. Shoals of minnows soon learn to watch for the dish-washing operation and scramble for the bread and fruit and vegetables that are thrown into the river. Teddy has put several stones and boards here for me.

Two turtles make their home under the exposed roots of the nearest tree. The boards upon which I stand to wash the dishes soon become the favorite idling place of two water snakes. It is disconcerting, only when it is sudden, to see a snake's head peering forth from a board on which one is accustomed to stand. There is something fascinating about the bright attentive heads and the active red tongues; one really learns to watch for their coming—and going. They would not understand that the things I threw at them—sticks and stones—were

not like the eatables that I threw to the minnows. I soon grew accustomed to their being near.

Teddy's boat appears in the distance. The camp is in order, and when he arrives I am ready to join him in his plans for the day.

Then dinner time comes, and we have a chicken that has been roasted by one of the village women, and our fresh vegetables, and a musk melon for desert. We feel lazy for an hour after dinner and watch the camp fire—which we keep burning more or less all the time.

Then we get into the boat and row down the river. Beautiful camping places have been selected by other parties on the shore. We wonder whether they have the same sense of delightful freedom, of isolation, that we have. We feel as far away from civilization and its defects as if we were two thousand miles away from our native city, instead of twenty.

Then we row around our island. The sun is getting low; it is time to go for the milk. This usually takes us an hour. When we return we have supper. We sit on the platform and watch the stars, or, if we feel like reading, we light our lamp and go into the tent; but early rising and an active day in the open air sends us to bed early. We watch the "eight-twenty" train go fleeting past. The station light half a mile away glimmers until the train has left; then it always stops suddenly. We go into our tent, make up our bed for the night, and sleep soundly until the early bird-calls awaken us to another day's doings.

THE THUNDERSTORM.

During all our preliminary planning, Teddy reckoned on a thunderstorm with a certainty that seemed to me quite amusing. He evidently did not think that our camping experience would be complete without it. When he raised the tent he braced it in the back with a ten-foot pole, to protect it from the wind that would accompany the storm. But if this should give way, he brought a lantern along that was to light us when the furious wind had blown down our tent. I did not dwell on the thunderstorm for my part;

and while I thought Teddy would be rather disappointed if it did not come, I was quite willing to dispense with it.

About nine o'clock on the first night we camped out, the man from whom we had hired the boat came down to the island to exchange the one we had for another one. Thunderstorms were mentioned.

"Hope you won't have the experience one party here had. When it rains very hard the river rises and overflows this island. One party had to swim away," and he rows away, whistling. Neither Teddy nor I can swim.

A few days later a good-natured Irishman asks us: "How long have you been camping on the island?" Teddy tells him. "It's nice," he replies, "but I shouldn't like to be on it during a thunderstorm."

It gets a little tiresome, this constant talk of thunderstorms. We do not bother about thunderstorms in the city.

On Saturday afternoon, our fifth day out, we take some visitors who have spent the day with us, to the station, which is not more than half a mile



away. As we go back to our boat, we notice that heavy clouds hang low over the island. It begins to lighten vividly. Shall we hurry and make the island before the storm breaks, or shall we wait in the station until it is over? It begins to rain; we had better wait. So we sit in the station and watch the weather from the little windows. We wait for an hour while the lightning flashes, and it thunders as if the earth were being torn open; and the floods descend.

When the rain nearly ceases to fall the prospect of our tent with the bright little coal-oil stove is so much cosier than the dismal station, that we get into our boat and pull rapidly to the island. We find everything in good order. It is cool and damp and still drizzling outside, but our little coal-oil stove soon makes everything warm and cosy inside. The canned baked beans that we brought along for just such a cool evening are soon ready. There is apple sauce, too, and sweet pickles, and musk melon, then some bonbons. How foolish it would have been to stay in the village and go to the hotel for the night, as Teddy suggested. Why, the rain must be entirely over in a short time. Thunderstorms *never* last for more than an hour or two!

But when we finish supper and peer out into the dark night, our words are more hopeful than our thoughts. What if it should settle into a steady one or two days' rain? No, it must not do that. We are expecting company to-morrow, and it *must* be clear.

We go inside and sit each on his side of the table. When we want things we have to hand them to each other; there is no room for walking around in the tent. The lamp has been lighted ever since we ate our supper, and now we get out our books, Teddy, *The Adventurers*, and I, *The Gadfly*. It is the first time we have really settled down to read since we have been away. We will only read a little while and then go to bed early, as we have done each night. What was that rumbling sound? Not blasting. Surely they are not blasting on a rainy Saturday night. It cannot be th——. Did you see that light? Yes, there is no mistake about the thunder this time. Teddy's thunderstorm has come at last.

We read for an hour. Then Teddy goes out to see to the fastening of the

boat. He takes off the padlock, but fastens the chain very securely. The rain is coming down in sheets. At ten o'clock there is a sharp flash which makes my right hand tingle. It is followed by a burst of thunder, the loudest I ever heard. When we next look out of our little ventilation space, a bright glow fills the sky. Some farmer's barn is burning, we surmise. It is not very far away. We can all but see the flames.

Another hour passes. The rain still falls steadily. Teddy goes out with mackintosh and umbrella and bales out the boat, and gives an additional tug to the fastening. It must on no account float away without us.

At twelve o'clock he tells me to go to bed. "Are *you* going?" I ask. "Pretty soon," he says reassuringly; "you go now, though." "I'll go just when you do," I answer, and turn again to the poor *Gadfly*. What would a mere thunderstorm have been to him!

At one o'clock Teddy goes out again and bales out the boat. The thunder and lightning have not once ceased, but the rain is not coming down by bucketsful, as it was earlier.

A soft splash on my head! Those wretched blue prints! The water has been collecting on them, and now dribbles down. We put the couch in the dry place in the centre. Oh, there are more dribbles! Will this rain ever stop? Who ever heard of a thunderstorm lasting so long before?

At two o'clock Teddy says the storm is over sufficiently for us to go to bed.

Soon we are both sleeping soundly. In the morning we find that the rainfall of the previous night has been very heavy. The river has risen a foot, and our beautiful landing is completely covered.

BREAKING CAMP.

The time has come for us to think of going home once more. How lovely it has all been! The day that we had fixed upon to break camp is gorgeously clear and beautiful. Even the thunderstorm, now that it is a mere memory, seems only to have rounded out our camping experience.

We have lived with our eyes open as they have never been before. We discover facts and gather scientific data, and while our deductions would astonish scientists, they interest us, and will set

us to some new studies when we get back to books. How tame book facts are beside the living ones!

No more little musk-melon boats to send out to sea, freighted with delicate corn husk sails, named and launched with all proper ceremony; what dainty color studies they made as they floated away down river!

No more cool, still mornings and radiant sunsets. Our visitors always missed the loveliest parts of the day.

Now we must go away and leave it all—the weeds, the bugs, and stones, and water pets.

How we linger over the packing! How regretfully we look back as our boat pulls away from the landing for the last time!

The men from the village who have been called upon to aid us in the matter of transportation and supplies mutter and scratch their heads. "I can't understand how in the world you ever came to go to the island when there are so many *good* camping places along the shore *near supplies and persons*."

Oh, thou barbarians! canst thou not understand that that is why we went to the Island of Delight!

THE PHANTOM LOON OF LOUIS LAKE.

A TROUTING INTERLUDE.

By Frank H. Risteen.

THREE summer days beneath a dull red oven of a sky we toiled through the still, dry woods where no rain had fallen for some weeks. It was early in the month of July, yet the roadside springs had all dried up, the little brooks had dwindled into scum-covered pools, and the big ones were sneaking down in pathetic diminution of volume through arid avenues of rocks on which the moss was yellowing.

The trees seemed to bear the scorching breath of the drouth with better cheer than one would have thought, but the turf beneath was as tinder that waited but a careless spark to envelop the forest world in flames.

The dust of the winding "portage" was brick-red—an odious, uncanny *poudre* that rose a few inches from the feet, and then sullenly fell back again. The horses, as they hauled the wooden-shod sled, perspired at every step. From the small bird choristers that flitted from bough to bough came, for the most part, uneasy twitterings. Only the white-throated thrush, perched high on his favorite tree, with his wild, free notes of music, rose superior to the spell of the ungracious season.

On the whole, this drouth, this nightmare of the vegetable world, this realistic picture, was depressing. The drouth had one redeeming feature, though. It had

banished untold millions of black flies, mosquitoes and bitum-noseums to the limbo of the weird. That was truly laughable. For they had been waiting to meet us here since the days of Nineveh.

On the morning of the third day we parted from our teamster at that "last barbaric outpost of civilization"—a dilapidated lumber camp—and strode forward through the unmarked woods. Lunching at a gushing spring, we climbed the slope of an overgrown hill called Shanaput. Old Henry, our guide and mentor, carried a pack that would have done credit to the immortal Bunyan; the tenderfoot guard modestly forbearing to excite him by competition. He plaintively remarked as he settled down in the straps that "he was gettin' a leetle mite shaky on his pins these days, and it took an eighty-pound pack to kinder stiddy him."

After the procession had filed over the wooded peak of Shanaput, and a little way down the western slope, the scene changed. The woods brightened up ahead, there was a flicker of a flying fox across a sunny opening; and suddenly we stood on the shores of Louis Lake, whose crystal waters shone like a gem in their emerald setting.

Waiting for us on the shore—he, too, might have been waiting since Nineveh

for all the emotion he showed—was our Indian guide Sebattis. Henry, who knew a little pigeon-toed Milicete, greeted him:

"*Queh bug-wid-geo-nes.*" (Well, you got here.)

"*Au-hauh.*"

Ten days before this, Sebattis, a Milicete from Quebec, who had never been in this country before and knew a few words only of the English tongue, was told by Henry, in words straight flung and plain, to go into Louis Lake and build us a bark canoe. This, for the Indian, meant traversing forty miles of unknown forest, first by a labyrinth of ancient logging roads to the Dungarvon stream, then by his wits where there was neither trail nor blaze. And, lo! here was Sebattis, standing before us like a statue of bronze, and at his feet, rocking gently in the mimic shore-swell of the lake, a brand new birch canoe.

Sebattis had threaded the pathless forest, erected his wigwam in the shade of a big rock, and in five days built this staunch and shapely craft, exactly as his forebears would have done in the days of Champlain. She was seventeen feet in length, thirty-two inches in width, built throughout with the widest and cleanest of summer bark. Good cedar being scarce, the ribs were of fir, which Sebattis had managed to steam by a fashion of his own.

To all our congratulations Sebattis only grinned and said: "Yas, purty good, purty good," then swung Henry's bundle amidships, and in a jiffy, propelled by the Indian's lifting stroke, we had reached our camping ground at the foot of the lake.

It was as handsome a mountain lake as one could wish to see—the water clear and cool, and the towering maples, beeches, pines and birches that lined the shore mirrored vividly in its steel-blue depths. The lake was about a mile in average length by half a mile in width. The hot fingers of the drouth had been powerless to touch this woodland paradise.

Our home for the next few days was to be at one of Henry's trapping camps situated within a few rods of a sheltered cove at the foot of the lake. There was something bracing, and yet pathetic, in the thought of the sturdy old trapper inhabiting these lonesome huts in the winter months, when all the forest world was white, and sallying forth day by day

through the trackless drifts in search of the otter, beaver, sable, mink, lynx, fisher and fox.

Henry decided, upon mature consideration, to occupy the old camp with Sebattis, while another tent was pitched nearer the shore. This tent was the special care of Sebattis. He made us a birch bark table, canopied by a roof of hemlock from the rain and sun; he replenished our balsam beds with fresh boughs daily and kept a bountiful supply of wood on hand for the open fire at night.

There was only one thing essentially the matter with Sebattis. If any liquid nourishment was left outside the tent when all hands turned in for the night, Sebattis was certain, later on, to develop symptoms of somnambulism. In the stilly hours near the dawn the redskin felt constrained to arise and absorb the offending fluid. Sebattis was a man of great physical strength, and a most active, willing worker. He could dissolve more firewood with his axe in a given space of time than any man, red or white, I ever knew.

His night walks never impaired his enthusiasm for firewood in the morning. On the contrary, we soon learned to gauge with accuracy the effects of these nocturnal operations by the force and fury of his attacks on the forest in the morning. Whenever the trees seemed to be falling down on all sides of us, and their shattered trunks to be hurled with violence about our tentyard, it was an infallible sign that Sebattis had struck a "pay-streak" in the night.

The Indian seldom spoke except in monosyllables, but the evening we arrived, as he sat before the blaze solemnly puffing his pipe, there was a trace of fear in his voice as he remarked:

"Boys, dar's one big ghost loon on dis lake. By tundurs, I hear 'im call all time las' week. Sartin, I look all roun'. By tundurs, I can't fin' 'im 't all."

While Sebattis was down to the spring, Fred declared: "Do you know, it has always been one of my pet ambitions to shoot a loon. I have no compunctions whatever on the score of killing them, owing to the immense amount of fish they destroy, and there's a kind of honor in it, too, they're so mighty hard to hit."

"Well," I said, "there's a small lake just west of this that I guess Sebattis knows nothing about. Probably that's

where this phantom loon of his is hanging out. I should think we might be able to reach his necktie with these sweet little 22s."

In addition to the birch canoe, there floated in the cove a venerable raft, or ram-cat, which Henry had been using for some years. Next morning before Fred and I turned out, the guides poled the ram-cat up the lake, with intent to return to the Dungarvon camp to bring up a load of supplies. To Fred and I was left the care of the camp for the day. Henry said in parting that if we wanted fish, the cove was as good a chance as any.

The men made such an early start that the sky was only beginning to exchange the blue-black of night for the sapphire of the dawn, and a few stars were still pulsing in the zenith as we heard the poles thudding up the shore.

When we launched the bark the East was paling rapidly, the lakeside air was chill and little wisps of vapor streaked the water everywhere. Across the lake the music of the whip-poor-wills, shyest of feathered vocalists, still smote the brooding air in a wild confusion of echoing notes.

At the first cast of Fred's dainty six-ounce rod, all sights and sounds of the morning resolved themselves into the nebulous background of a truly thrilling drama. A gallant warrior trout arose from the depths of the cove, opened a pair of jaws that would have taken in a bar of soap, and dove with a resounding splurge. The sensation of wonder as we see it depicted in the comic papers of the day is mild compared with the wild expression that possessed my Frederic's comely face. All this time the tip of the rod was under water, and the reel whizzing from the masterful tugs of the big trout. Fred braced up then and applied the butt, and the fight commenced in earnest. It lasted without intermission until the quarry was brought to net. The fish weighed exactly three pounds, and Fred held him up, measured him, and admired him again and again with unmitigated joy. Finally I suggested.

"Well, better not lose time, old man. You might get another."

"What? Like this?"

"*Au-hauh.*"

Fred smiled incredulously as he deftly

cast the fly with an overhand fling to the far side of the cove. Instantly the water was lashed by a lusty tail, the reel shrieked joyously, and round No. 2 began. And so it was to the end of the chapter. At every cast of the fly from one to a dozen of these noble-minded fish went for it, those who missed it returning politely to the bottom and fanning themselves for the next heat.

It was just that way all the time we were at Louis Lake. We caught hundreds of these big trout and returned them to the water. Fly, pork, fish or worm—all bait looked alike to them. They were no giddy aquarium pets, but first cousins to the Dam Leapers of the Winnebago! The water boiled the moment the hook touched the surface, and in sunny weather there was always to be seen on the bottom the same wistful, open-eyed procession of disappointed ones.

None of these trout weighed less than a pound; the largest weighed a trifle over four pounds. And Henry had told us this wasn't really a good lake for trout! At Burt Lake, Jack's Lake, Holmes' and other lakes, trout of six and seven pounds were numerous, and he would show us soon a pool at the mouth of the North Pole branch of the Little-Sou-West, where it was no trick to hook thirty salmon in a day.

Dinner was followed by a reminiscent pipe—and then we proceeded to look up the lair of the big ghost loon, of which Sebattis spoke. Taking the trail that led westward from the camp, a walk of half a mile brought us to a small marshy lake. Here we sighted at once a fine specimen of a loon and turned loose our rifles, from the shore. Every time the loon showed his head both little guns cracked, and down he went. As his education improved, he ceased to wait for the rifle, but came up with a panicky "How," and dove instant. He was plainly losing wind by his efforts.

The trouble was, the range was too great for the little guns, and the loon made his somersault with such celerity that it was impossible to get a decent bead on him. Fortunately, we found an aged ram-cat on the grassy shore, and when Fred had poled this out and anchored in the middle of the lake, while I manned the shore, the loon began to look like ours. The game became exciting.

Often the spatter of the little bullet was lost in the splash of the loon. The latter now barked like a scared dog every time he rose. Nevertheless, our scheme didn't seem to work. The loon was out of effective range, so far as the shore battery was concerned. Moreover, he had a festive habit of coming up behind Fred, and diving before the latter could wear ship.

"I say, old man," Fred yelled, "you've got to come out here and man the port battery of this craft. The loon has too much speed for me."

After I had boarded the ram-cat we were able to give the loon one battery or the other whenever he appeared. The distances he traveled under water were simply amazing. In three seconds he sometimes went over a hundred yards! Once he passed close to the ram-cat, a few feet under the surface, fairly churning the water to foam in his frantic flight.

Shortly after this Fred caught the big bird with a shot fair in the neck, and he flattened out in the water. We poled up leisurely and hoisted him on the raft. It was just then that Fred's superhuman power of expression in the line of impromptu amazement reached a climax, for on jibing the ram-cat for shore, he suddenly descried another big loon not fifty yards away, which propounded an emphatic "How," and dove like a shot.

The marvelous feats performed by loon No. 1 were now made plain. There had been two loons in the lake all the time, but as they had never both come to the surface at precisely the same moment, we had supposed there was only one. We had really been peppering two loons for the past half-hour. Our united energies

were now devoted to loon No. 2, which soon succumbed to a shot abaft the bread-room, from the port battery.

As Henry and Sebattis, in the cool shades of evening, tramped wearily up from the landing, Fred casually remarked: "Henry, I wonder if there would be any chance now of knocking over a loon or two around here? I'd like mighty well to take out a couple of good skins and have them mounted."

"Oh," said Henry, "you might shoot from now till kingdom come before you'd hit a loon with a rifle on one of these lakes. I've knocked around here for twenty-five years, and I never got one yet. Besides, I chased them all out of here last spring and destroyed their nests."

Just then the veteran woodsman raised his eyes to the door of his wigwam, where our two handsome trophies were hanging, resplendent in their glossy coats of white and blue. He glanced at Fred, and then at me reproachfully, but uttered never a word.

Not so, Sebattis. As soon as he beheld the birds he gave vent to a gurgling cry of horror and dropped his pack, incidentally mingling three bottles of mustard pickles with a roll of Fred's finest underwear. "Aug-wim we-gah-stooks!" (Oh, the ghost loon!) he shouted, and rushed down the path to the landing.

Fred's roars of laughter soon restored his pluck, and later in the night we heard Sebattis laughing softly to himself. He must have had a very severe attack of somnambulism shortly after this, for in the early dawn, in the cold light of the sunless sky, he arose and fell upon the trees like a demon of destruction.



YACHTING ON THE GREAT LAKES.

By John B. Berryman.



FROM the head of Lake Michigan to the outlet of Lake Ontario, stretches a continuous waterway of more than eleven hundred miles, with a maximum breadth of one hundred and five miles, in Lake Huron. This is all open water, with the exception of sixty miles through the St. Clair and Detroit rivers, between lakes Huron and Erie, and some thirty miles through the Welland Canal, which cuts the narrow peninsula dividing Lake Erie from Lake Ontario. The maximum depth varies from 275 to 1,000 feet.

As Lake Superior does not boast a yacht club, its vast expanse has not been included in this purview, but the enthusiastic cruiser may, if he so desire, add to his itinerary the 60,000 or 70,000 square miles of water covered by that lake and the Georgian Bay.

These arid facts are given simply to show that should yachting not flourish between the Chicago River and the Thousand Islands, it is not from lack of water. And water, so a well-known commodore informs me, when intelligently blended with other components, is absolutely essential to a proper enjoyment of the sport.

The people of the cities on the Great Lakes have an environment conducive to maritime development; and the marvelous growth of inland shipping in the past ten years witnesses that, commercially, the middle west has been fully alive to its opportunities. The volume of tonnage passing through the Sault Ste. Marie Canal, in a season is greater than that of any waterway in the world, and vastly in excess of the tonnage of the famous Suez Canal.

At the first blush this seems to have little bearing upon yachting. The 7,000-ton freighter is a very distant relative of the jaunty steam yacht, yet the development of commercial shipping has an appreciable effect upon the growth of shipping for pleasure only. A maritime nation is a yachting nation. People accustomed to the sight of ships and habituated to water travel, take great interest in everything pertaining to the sea. The spirit of the old Vikings is latent in most of the Anglo-Saxon family, and needs but suitable environment to germinate.

Yachting, as an organized sport, had its inception about half a century ago. Pleasure craft there were before then, and possibly races between single boats, but no organizations with fixed rules such as we have to-day, and as the communities on the shores of the lakes were only in the formative period fifty years ago, we could hardly expect much interest in a sport, which, more than all others, demands leisure and money, among a people possessing neither the one nor the other. Fifty years, however, have worked many changes. The oldest and largest yachting organization on the Great Lakes is the Royal Canadian Yacht Club, of Toronto, Canada, founded in 1852. The membership at the present time is slightly in excess of 800. The club has waxed fat in the forty-eight years which have passed since. Dr. Hodder, Major McGrath, J. J. Arnold, and a few others, made a modest beginning, but, like the faithful Adam, time has not shorn it of its virility. The club maintains a town home on the city side of Toronto Bay, and a second house beautifully situated among

shady trees on the island which forms the natural breakwater of the harbor. The fleet is large and of excellent quality for either cruising or racing.

The ambitious city of Hamilton boasts two clubs — the Royal Hamilton and the Victoria—both flourishing organizations. Hamilton has a splendid natural harbor

falo, Cleveland, Toledo, Erie and Sandusky—all doing well, and holding every year a regatta at Put-in-Bay, which is always well attended.

Sandusky seems entitled to the distinction of being one of the yachting pioneers. The Sandusky boats, *Mist*, *Witch* and *Winona*, were in the habit of carrying off nearly every prize in sight in their day, which was somewhere between 1856 and 1861. The yachting men there went to sleep for many seasons, content with past glories, but the interest has revived during the last few years.

The Erie Yacht Club is the youngest on the lake, having been formed in 1896. There has never been any real yachting at Erie, but there must be a hereditary seafaring strain in the old town which should make sailing popular. It was at this port Commodore Perry built, equipped and

manned his fleet in 1812 or 1813. From Erie, he sailed to the immortal encounter which earned for him a place among the nation's heroes, and at Erie the bones of his old flagship, *Niagara*, rest peacefully on the bottom of Misery Bay.

The tars of Detroit have two organizations — the Detroit Boat Club and the Citizens' Yachting Association, the latter formed by merging the old Detroit Yacht Club and the Michigan Yacht Club.

The Detroit Boat Club, as its name implies, was originally an oarsman's organization; the yachting feature has grown gradually. The club was founded in 1839, and is, I believe, the oldest aquatic club on the chain of lakes. Had yachting been a feature from the first, the club would antedate any other yacht club by many years. It has a very handsome home on Belle Isle, an island in the river opposite Detroit.

The Detroit boats are sailed principally upon Lake St. Clair, a broad, shallow sheet of water formed by the widening of the river of the same name; but they are usually well in evidence at the Put-in-Bay



Cleveland Y. C. House.

especially well adapted for small boat sailing, and this has tended to build up the sport among the younger element.

Canada has, also, a strong club in the venerable city of Kingston, noted for its good sailors. Yachting all along the Canadian shore is "fashionable," and, consequently, flourishing. What fashion approves thrives. Were it the correct thing to own a yellow dog, we would have yellow dog clubs in every hamlet, each with a waiting list a yard long.

The year 1886 was made more or less memorable by the founding of the Rochester (N.Y.) Yacht Club, an aggressive organization with a decided taste for racing, owning a commodious house on the Genesee River, and a fleet of fifty-eight boats.

The Oswego Yacht Club shares with Rochester the burden of carrying the Stars and Stripes to the front at the annual meetings of the Lake Yacht Racing Association. They have some excellent sailors at Oswego, and a respectable list of boats.

Upon Lake Erie, there are clubs at Buf-

regattas of the Interlake Yachting Association.

On Lake Michigan there are a number of very creditable organizations. The Chicago, Columbia and Jackson Park clubs, all of Chicago, and the Milwaukee, Sheboygan, Green Bay, Little Traverse Bay and Grand Rapids clubs, at the ports thus named.

The oldest of them is the Chicago Yacht Club, founded in 1875. The club owns a unique building, modeled after an ancient galleon, but as the membership has outgrown the present accommodations, plans are making for a new house to cost in the neighborhood of \$25,000. The club fleet is composed principally of large boats, seven of the number measuring over fifty feet racing length.

The Columbia Club has a large fleet, especially strong in the classes below twenty-five feet, and a new club-house has just been completed.

It is very lamentable, however, that Chicago should, when her wealth and population is considered, be so far behind other lake cities in yachting matters.

Not that the number or quality of the boats is insignificant, but with a population equal, or in excess of, all the cities on Lake Ontario or Lake Erie combined, one naturally looks for plethoric rosters of both men and yachts. The truth is, there are at least two clubs on the lakes, each with a membership larger than that of the three Chicago clubs combined. I do not think this condition will exist for any great length of time. The sport seems now to be in the hands of the right people, who are going about the matter in the right way to popularize

it, and the increased interest is apparent.

The Milwaukee Club has a large membership and excellent quarters overlooking the splendid artificial harbor. The fleet is far from what it should be, but this will be remedied in time, probably.

To sum up, there are some twenty-two clubs on the lakes, with a membership of

about 5,500, and possibly 600 to 700 yachts of all sizes.

The clubs on Lake Michigan belong to the Lake Michigan Yachting Association; those in Detroit and upon Lake Erie to the Interlake Yachting Association, and those on Lake Ontario to the Lake Yacht Racing Union.

These organizations are again consolidated into the Yacht Racing Union of the Great Lakes. Each association sends three delegates to the central body, and these delegates are known as the Council. The president of the Council for the current year is Mr. Chas. E. Kramer, of Chicago, who was secretary of the Chicago Yacht Club a quarter of a century ago. The serious business of Mr. Kramer's life is making post prandial speeches and attending yacht club meetings. As a recreation he practices maritime law. The secretary is the inimitable J. Edmund Burroughs, of Rochester, N. Y., known far and wide as the gentleman who walked the mast of the old *Madge* from the hounds to the deck. The *Madge* was heeled so far over at the time, that he



Rochester Y. C. House.—*Genesee* in Foreground.

could not get in any other way, and he had become tired of sitting in the raging surge.

At present the rules are practically uniform on all the lakes, but a local association is privileged to make rules for its own members, irrespective of the central body.

The system of measurement now in force is the well-known girth rule,

$$\frac{L.W.L + B + .75 G + \frac{1}{2} \sqrt{S.A.}}{\sqrt{2}}$$

in which

L. W. L. = Load water line.

B. = Beam at its greatest point.

G. = Girth.

S. A. = Sail area.

Girth is the length of a line drawn around the immersed surface of a hull from water-line to water-line at a point six-tenths of the distance between the fore-and-aft ends of the water-line measuring from the forward end.

For centreboard boats the girth is taken around the hull as above, and to this is added twice the distance between the underside of the keel and the centre of area of the board. The centreboard must not be ballasted except to overcome flotation, ballasted boards, or those made of metal, if they weigh more than an oak board two inches thick of the same superficial area, are measured as fixed keels.

This rule has practically been tried only one season, but the test given last year, when six challenging and six defending yachts were built for the trial races, preceding the contest for *Canada's Cup*, crowded much experience into a limited time. On the whole, the rule worked satisfactorily, especially in the direction of equalizing the elements of speed in divers types. It is not productive of such a large-bodied boat as the 35 per cent. midship section rule which preceded it, but it seems to make a fast craft with



Chicago Y. C. House.

body enough to permit as fair accommodations as a rational man would look for in a boat intended primarily for speed.

These trial races demonstrated that a very undesirable craft could be built under the girth rule, but the fact remains that of the twelve built, the three (*Gene-see*, *Beaver*, *Minota*) which undoubtedly stood first, second and third in point of speed, were all good, wholesome boats, built on sane lines.

The end of racing is to win. If a rule be so framed that an honest boat stands a fair chance of winning, then honest boats will be built and the sport be the gainer. After all, is not speed the result of a careful balance between all elements rather than an exaggeration of any one?

In order to build up a fleet of substantial seaworthy yachts, the Yacht Racing Union, three years ago, adopted a table of scantling setting forth in detail dimensions of the stem, sternpost, keel, keelson, frames, floors, clamp, bilge, stringer, deck beams and planking for each class. All boats constructed since the adoption of this table, to be eligible to Association regattas, must be built in accordance therewith. This was a decided step in the right direction, and its wisdom will be clearly apparent as time goes on.

During the summer



Detroit Boat Club House.

season the lakes are comparatively free from destructive storms. Of course, fierce squalls are not unusual (what body of water is free from them?), but their duration is short, and, as a general thing, their coming may be seen in ample time.

Any well-built, ballasted yacht may cruise all summer with perfect safety, provided that insanity does not develop in the skipper. When the wind blows fresh it kicks up a short, steep sea which makes the berth of the lookout forward rather damp, and if the wind happens to have been blowing strongly in another part of the lake, we sometimes have a heavy ground swell.

Upon Lake Michigan a heavy blow

centreboard is a necessity. I never could become very enthusiastic over the type, but the world would be deadly monotonous if we all thought alike.

Since the first club burgee was hoisted the lake yachtsmen have fought out hundreds of friendly contests with boats of every conceivable design. Deep English cutters—planks on edge—have been tried out against beamy sand-baggers; compromise centreboard boats have met fin keels; cutters of diverging lines have met each other. Every successful yacht on salt water has had its prototype upon the inland seas, and many have been floated which were never dreamed of in old Neptune's philosophy. On these waters, in



Milwaukee Y.C. House.

from the northeast brings down a vicious sea which is liable to seriously strain a vessel not well put together.

For anything except afternoon sailing, the best kind of boat on the lakes is one with good freeboard, beam and outside lead. The cutter and schooner are probably the most desirable types—the cutter is, in fact, the predominant type on lakes Ontario and Michigan. The fin keels also have shown themselves excellent sea boats when well built. Some of them have passed safely and easily through tremendous weather.

Upon Lake Erie boats do not run so much to fixed keel; probably owing to local conditions, the centreboard sloop is very popular at Detroit—of course, the

fact, American and English designers have had their best opportunity to study and adopt what was desirable in the product of the other.

This has followed, naturally, through the presence of a large Canadian yachting interest on one side of Lake Ontario looking to England for designing talent, and of an American contingent on the opposite shore enlisting the services of the naval architects of our own country.

In the earlier days, McGiehan, of New York, was one of the more prominent American designers, and contemporary with him was A. G. Cuthbert, of Coburg, Ont., who built *Atalanta* and *Countess of Dufferin*, which made very unsuccessful attempts to "lift" the *America's* Cup. It

may be remarked in passing, that other designers of great reputation, and with far better financial backing than old Capt. Cuthbert ever dreamed of, have failed in the same way.

Following Cuthbert and McGiehan, came a remarkable series of high-class yachts from designers of the modern school. The late Edward Burgess sent *Merle* and *Vilueth*, both successful, but the former particularly so. Wm. Fife, Jr., the designer of *Shamrock*, contributed *Zelma*, *Yama* and *Canada*. The yacht last named defeated *Vencedor*, of Chicago, a Poeckel design, for an international lake trophy in 1896. This trophy is now known as *Canada's Cup*. Watson, the designer of the *Valkyries*, who will design the new challenger for Sir Thomas Lipton, sent many years since *Verve I.* and *Verve II.*, and later on that splendid cutter, *Vreda*. Cary-Smith is known through the sloop *Cinderella*, and schooners *Clo-rita* and *Sallie*. Last year, Arthur Payne, of Southampton, who designed, I believe, the successful English cutters *Saint* and *Penitent*, sent the lines of the graceful cutter *Beaver*, the defeated defender of *Canada's Cup*, while Hanley, of Quincy Point, Mass., had the victorious challenger in *Genesee*, undoubtedly the fastest 35-footer on fresh water, if not in the country.

There is one challenge cup on the Great Lakes which is truly international in a broad sense. This is *Canada's Cup*, previously referred to. The cup had its

origin in 1896, when E. C. Berriman, through the Lincoln Park Y. C. of Chicago, challenged the Royal Canadian Yacht Club of Toronto to a match race between two boats in the 45-foot class.

The challenge was accepted, and the contestants, *Vencedor* and *Canada*, met upon neutral waters at Put-in-Bay, Lake Erie. For this match the Toledo International Yacht Race Association donated a handsome sterling silver trophy, designed by Tiffany. The cup bears the emblematic figures of the eagle and the lion, and is artistic in conception and execution.

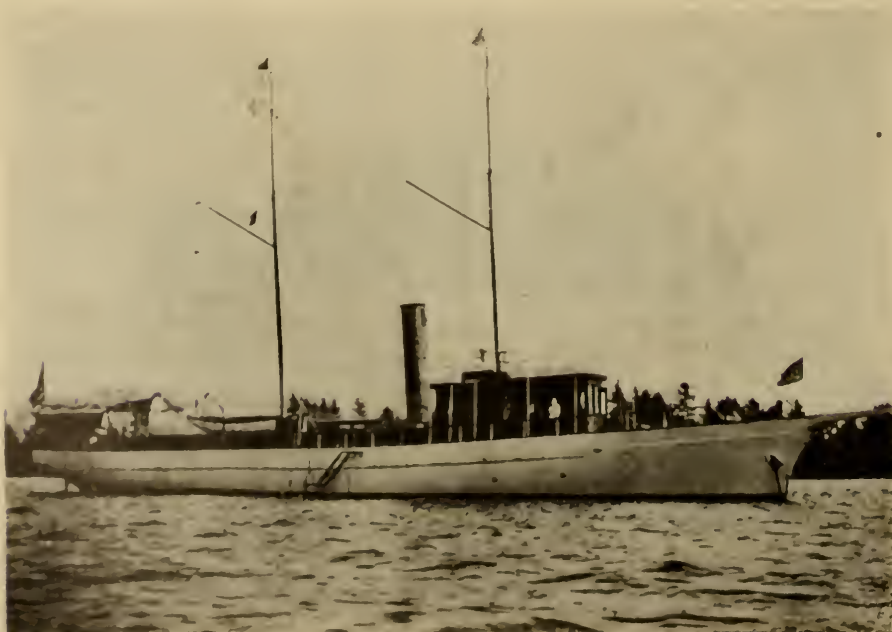
The match was decided in favor of *Canada*.

The owners of *Canada*, afterward, by deed of gift, transferred the cup to the Royal Canadian Yacht Club, to be held as a perpetual international challenge trophy.

In 1899 the Chicago Yacht Club challenged, selecting the Rochester yacht *Genesee* after a series of trial races. The holders defended with the cutter *Beaver*, choosing her after a number of trials, in which six boats competed. *Genesee* won in three magnificent races, and the cup is now in Chicago. The two contests which have taken place for this trophy have been the cause of some remarkable boats being built, and the future contests, for contests there will be, as the Canadians are too good sportsmen to let matters rest as they are, will of necessity bring out the highest skill of American and English designers.

There is yet another the Fisher Cup, which originated in Chicago in 1882, and has been the cause of much exciting racing, but it is open to yachts belonging to the Lake Yacht Racing Association only, so that the contests are limited to clubs on Lake Ontario.

It is the misfortune of the lake yachtsmen to have ports of call very far apart. Our shores are not indented by harbors, nor enlivened by summer resorts every few miles.



Flagship *Thistle*, Chicago Y. C.

It is this feature, more than any other, which has whitened the waters of Long Island Sound and the Massachusetts coast with sails.

This stimulus we shall never have, but

so long as the free winds blow in the halls of heaven and the blue waters dance in the summer sun, we shall not lack for men who appreciate the witchery of the deep.

THE PROGRESS OF LAWN TENNIS.

By J. Parmly Paret.

DESPITE all precedents in other sports, there are still those who believe that lawn tennis has not progressed, and startling as the statement may appear, Dr. James Dwight declared to me within the last few months that "Both Sears and I are perfectly sure

certainly of return, their speed and their control of the ball. Pettit, the veteran professional, who played so often with all of the best of the early American masters, declared only a few seasons back that he did not believe any of the old-time experts of the days of Sears and Dwight could live in the speed of to-day, nor could they make any headway against the aggressive volleying tactics of recent years.

The volley is far from a new stroke, but all of the progress of the game during the last eight or ten years has been in its development. We have learned to hit the ball faster off the ground, and perhaps a little more accurately than former experts at the game, but no new use of the ground-stroke has yet been invented, as in the case of the volley. Recent successes abroad by ground-stroke players, most notably A. W. Gore and S. H. Smith have emboldened the followers of that style of play to believe that volleying has reached its limit and that better ground-strokes are again undergoing improvement that will once more eclipse the net-players.

In this country we have no parallel for this success. Volleying has been consistently tri-

umphant for some years, and the closest students of the game on both sides of the ocean believe that this is due to the difference in volleying methods that are common abroad from those most successful here. R. F. Doherty, Dr. J. Pim, W. Baddeley, and a few other English leaders of recent years, volley from almost as close to the net as do the successful



Malcolm D. Whitman Making a Back-Hand Pass.

that W. Renshaw would have beaten Wrenn at Newport in 1897, if he had been what he was fifteen years ago." On the other side of the question, however, we have the opinions from excellent authorities, and the modern writers abroad, as well as those on this side of the ocean, almost unanimously agree that modern players have materially increased their



W. Gordon Parker.—End of his Forehand Drive.



Malcolm D. Whitman Waiting for the Service.

American experts, and their superiority over the ground-stroke players abroad has been most consistent. It is the English players, who hang back near the service-line and volley underhand, that are beaten by ground-strokes; and it is not surprising that they are defeated.

All volleyed strokes are used for attack and should, therefore, be struck downward in order to increase their aggressiveness. To do this, the ball must be taken before it begins to drop, in order to play it while still above the level of the net, and this is impossible with most low balls from near the service-line. Hence, the attack of the volleyer, if he stands so far back, is materially weaker, because the ball must be struck under with a lifting motion to be raised over the net, and slow enough to fall again on the other side before the boundary of the court is reached. Opposed by a volleyer of this type, the ground-stroke player finds a much weakened attack against him, and continues patiently at his own methods of play until they succeed.

The newer school of American volleying requires the player to come in very close to the net, always well inside of the service-line, and attack aggressively with downward strokes. In modern lawn tennis this is the winning position, and; with the opponent at the base-line, the tactically correct position from which to kill the ball.

Volleying alone, however, is almost as useless as ground-strokes without the ability to volley. It requires an even development of skill to make the high-grade expert, and the knowledge of when to come in and use a volleyed stroke to kill the ball; and how to get in safely to this position is the highest skill in the game, as we know it to-day. There are hosts of players who can make a good volley if they can reach the ball, and others whose ground-strokes are excellent; there are few who combine the two qualities with the cardinal virtue of good judgment in their use.

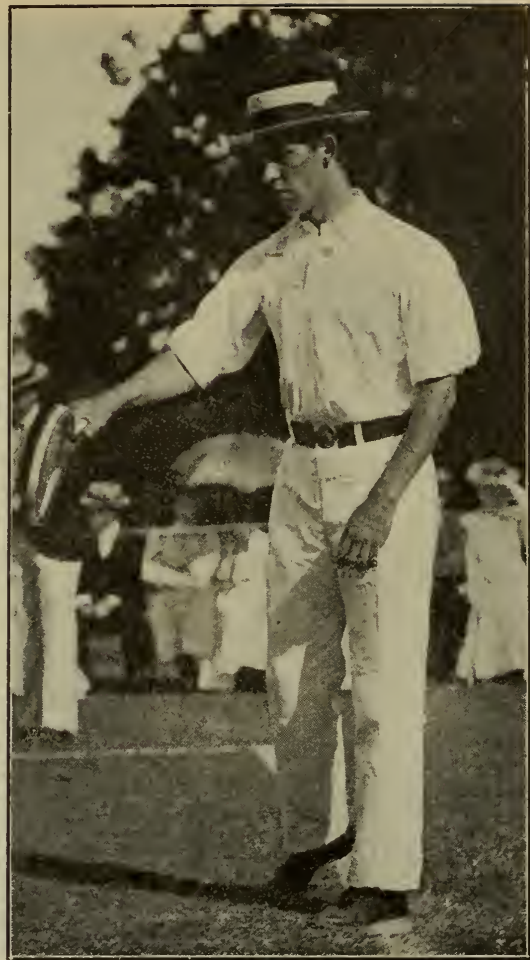
The weakness of one-sided development is sometimes carried to fatal excess; men of a single stroke are easily beaten by forcing their weak sides, and "heady" players soon discover the weakness of an opponent and make good use of it. This ability to force the weak spots is used to a wonderful extent by the famous Doherty

ty brothers, and to it is due much of their success in doubles. Opposed by such a team as Hillyard and Smith, for instance, as they were at Wimbledon a few years ago, they soon opened up spots on the court where the ball could be placed for clean-earned aces, by forcing Smith's back-hand side.

For some years there has been in America a school of players of a most brilliant type, and their successes have caused their style of play to become generally looked upon as our national type. Such men as Larned, Hobart, Hovey, and the newest recruit, Davis, sacrifice everything for brilliancy, and their impetuous style requires that the ball must be killed quickly and at all hazards. The remarkable success of Goodbody, the English expert, at Newport in 1894, opened up a new school of play among the experts on this side of the ocean. To be sure, Wrenn had already progressed somewhat along the same lines as Goodbody, and his defeat of the challenging visitor was due largely to his greater skill at the same style of play. But the foreigner's consistent success suggested a new line of thought to the more studious of American players, and some of them began to wonder if, after all, the better player was not the man who made the fewer mistakes, instead of the man who made the greatest number of "kills."

Goodbody, it will be remembered, beat Hobart, Larned and Hovey, each in five sets, on successive days at Newport, only to finally succumb in the challenge match to the American champion, Wrenn. Against Hobart and Larned, then the "high priests" of the erratic brilliant school, Goodbody earned less than one-fifth of the points credited to him, because his opponents gave him over four-fifths in errors; while, on the other hand, each of the Americans earned nearly half his points on "passes," because Goodbody made so few errors. Yet the foreigner, not the American, was the winner in each case, and it was apparent that the table of "earned points" did not indicate the better player after all.

Gradually, but slowly, this fallacy of the superiority of brilliant play is being realized by the American players, and the younger generation is learning some of the secrets of English success at the game—the certainty of play that permits



William A. Larned Returning a Ball Back-Handed.



Robert D. Wrenn, Ready for Attack.

so few errors—and those who have combined with this the aggressive American method of volleying, are the leaders in the new school which is destined, I am confident, to furnish our champions of the future. They are the players who have learned to use what has become known as the “forcing stroke.”

These two styles of play, as shown by exponents of the brilliant and the forcing school, were first strongly contrasted in Larned and Wrenn, the greatest types we have had. The standard of play shown by them in 1897, when they beat the crack English players over here so many times, was the high-water mark in American lawn tennis. We certainly had no such players before their day,

every point he wins shows it. He hazards everything on one brilliant stroke that must end all further resistance; he stands or falls by his attempt, often from an almost impossible position and sometimes nearly hopeless, to hit the ball so fast or so close to a distant line of the court that the opponent cannot return it. On the other hand, the forcing player never goes to such extremes. He must be reasonably certain of the success of any stroke before he undertakes it. If he is in difficulties he always has a lob ready to help him out, and he uses only as much speed or margin as is necessary to keep the ball away from his antagonist. His creed is never to kill a difficult ball, and never to miss an easy kill.



An English Championship Match at Wimbledon. Doherty Brothers vs. Hillyard and Smith.

and I do not believe any of the newer men (barring occasional streaks of erratic brilliancy on the part of Davis) are equal to what Larned and Wrenn were three years ago. Larned returned to the game last season, but badly out of form, and those who drew the inference from his defeat that the younger men of to-day had improved over the former championship standard within the last two years, were misled, I think, by the older player's physical weakness.

In contrasting these two American styles of play, as represented by our greatest masters, it is not surprising that few people, even initiated players themselves, appreciate the skill of the forcing type. That of the brilliant player is all on the surface; the last stroke of nearly

Our greatest American tournament players, the most consistent winners, are those who have used this forcing method of play, but their skill is hidden so far beneath the surface, that it is seldom understood or appreciated. Nothing can be more beautiful to watch than the easy, graceful, brilliant strokes of Larned or Hovey, but the awkward, painstaking efforts of Wrenn or Wright make up in effectiveness far more than they lose in ease. For this type of player, it is the everlasting energy, the persistent aggressiveness that wins success, and it can be seen in every line of Wrenn's body when he is in action. He carries his weight low so as to be able to stop and turn, or change direction quickly; his legs spread wide apart so as to get a firmer base to

work on, and his racket always balanced in his hand ready for the next stroke. His attack begins with his first stroke, and from that to the last, he continues the persistent aggressive play that must soon force an opening for a sure kill.

Wright has followed much in Wrenn's footsteps, and one can see all of the same characteristics in his style of play. There are others, too, who have adopted Wrenn's style with success, and it must be only a question of time before that method of play will ultimately raise the standards of American lawn tennis above that which our brilliant exponents of the game have established for us.

A brief glance at the records of the championship tournaments should prove a wholesome object lesson for those who would play lawn tennis to win. Larned, the greatest of the brilliant players, in six successive years' struggle for the championship (1892-97), was beaten four times in the finals and twice in the semi-finals, although in each one of those six years he was thought to be as strong as any other championship candidate, and generally stronger. In the two years that followed Larned's last appearance (1898-99), too, the loser in the finals each time was Davis, who has since been the most brilliant follower of the brilliant school. Ever since Campbell's day (1892), the championship has been held every year by a player of the safer method, except for the single exception of 1895, when Hovey, naturally a brilliant player, cultivated enough steadiness to win a brilliant victory.

Whitman, our present champion, carries safe play to an extreme, often sacrificing aggressiveness for safety, and too



J. P. Paret. The "Chop" Stroke.

seldom coming to the net to kill. He lacks the energetic forcing that Wrenn showed and which Wright is rapidly developing with such promise, but has placed an unparalleled record of victories to his credit by the most conscientious and pains-taking kind of play. He is a master of defense, but not of attack. His position play is very clever, and he is almost infallible in strokes, but he too often fails to take advantage of well-earned openings for killing at the net. Opposed by a brilliant player, such a man will nearly always win on his opponent's errors.

Pure "stroke" players, such as Parker, Davidson and others of the hard-hitting type that depends on speed more than anything else for success, are always at a disadvantage when opposed by "heady" players, who force the play and select the opponent's weakest spot for attack, although the machine-like regularity and speed that is sometimes cultivated, approaches the battering-ram principle first made famous by the great English Lawford, and is often difficult to stop. Players who lob persistently and unnecessarily, as did Foote in his day, and Chace, are only dangerous to men who are weak in overhead play and in smashing.

A COMMON SENSE SWIMMING LESSON.

By Duffield Osborne.

EVERY one who has access to deep water ought to be able to swim, and yet many who are so situated cannot swim one stroke.

These are statements that will not be disputed; but let me add to them a third:

Any reasonably normal individual between the ages of infancy and senility can be taught to swim, and can be taught easily, surely, and in a remarkably short time.

At this point, it may be well to give ear to the chorus of disagreeing voices—many of them women's—exclaiming very much to this effect:

"I can't learn. So-and-so and so-and-so have tried to teach me, but it's of no use."

Very well. The best answer I can make is: "Come with me and I will teach you to swim in one lesson. I will not teach you to swim well, or far, or fast, but I will show you that you can keep yourself up in water. That done, the rest is mere strength and practice; and, meanwhile, consider how many times the power to swim a dozen strokes might mean safety; recall how sadly often the ability to regain an overturned boat would have meant one less in the sad list of accidental drownings.

Perhaps you will note incredulity in your pupil's eye when you speak so positively of her capacity to learn—incredulity that is not unjustifiable, in view of the thought that every book and every teacher I have read, seen, or heard of, seems bent upon deliberately complicating a very simple proposition. It is one of those curious instances of how clever people persistently overlook things obvious, and are prone to create difficulties where none exists.

The accepted method is for the teacher to take the pupil into water of from three feet upward, and, supporting him by chin or belt, to explain the motions of the breast-stroke. The aspirant is told just how he must shoot out the hands together, just how he must turn them, and sweep them apart and back, just how to draw them in to the body and shoot them forward again for the next stroke. At the

same time, it is explained that the legs should be drawn up, shot out well apart, brought together, and drawn back again. This double movement is just a trifle complex, though both teacher and pupil are probably so familiar with its details, the one in practice and the other in theory, that its complexity is hardly realized. So the teacher supports the pupil, and the latter goes through the explained movements more or less accurately. Then the support is withdrawn, and presto! what form the beginner has attained is gone on the instant, and he flounders hopelessly.

In the face of the one overwhelming fear that he may sink, all memory of the stroke goes by the board; the hands pat the water with no seeming aim but rapidity of movement, while the legs, in nine cases out of ten, promptly forget to move at all. Unless the teacher comes swiftly to the rescue, he is apt to have a half strangled pupil on his hands, sometimes an indignant, and, usually, a somewhat discouraged one. Add that the same thing is tried over and over again with more or less similar results, so long as the patience of the two holds out, and you will have the conventional first swimming lesson.

If support be withdrawn gradually, the collapse follows quite as surely; while as for the efforts of those who are trying to teach themselves, it is the same story the moment they venture to discard their life-preservers, boards, or other devices.

Of course, in the great majority of cases the aspirant ultimately learns to swim, in spite of early difficulties, but it is seldom without a very considerable expenditure of time, and we all of us know many who, whether from timidity, or nervousness, or lack of sufficient opportunity, have never found themselves able to take the supporting strokes when deprived of extrinsic support.

So much for the negative, and now let us consider the question from a positive standpoint.

Animals swim instinctively. That is the first proposition. Civilized men and women do not. That is the second. Hu-

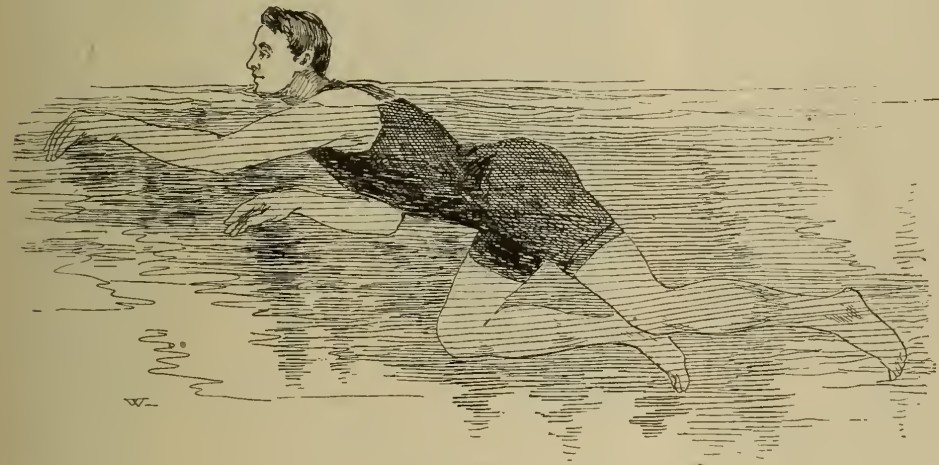
man beings compare, not unfavorably, I think, with most animals in the matter of the relation of weight to bulk. Why, then, the difference?

The answer generally given is doubtless correct. It is all a question of nerves. Men and women who can't swim are afraid of sinking. Therefore, they get rattled, and don't swim. Animals never think of it at all, and swim naturally. That is all there is to it.

Yes, that is all there is to it—not just the matter of nerves and fear, mind you, but also that little word: “naturally.” Animals swim naturally. If, however, it were possible, and if you attempted to teach them an artificial stroke as a *sinequa-non* of success, I warrant you would find almost as much difficulty in the mat-

in most cases none at all, is required to keep enough of the human body out of water to prevent drowning. If, however, it is desired to lie breast downward, with an idea of making more headway than is possible when lying on the back, the fact that the added weight of the head must be sustained without relative water displacement makes some definite action necessary. That, however, the breast-stroke is not the only movement which will accomplish the end, we all know, and the very simple question suggests itself: is there no simpler stroke that can be taught the beginner? next to one that will require no thought at all, that he will take to naturally, and by the aid of which he can learn how really easy it is to keep himself afloat.

The answer is equally simple. The animal keeps itself afloat by simply moving its legs as if in the act of going up a steep hill, and most swimmers, after they have learned the breast-stroke, make occasional trial for the purpose of rest or experiment, of what boys call “swimming dog-fashion.” The legs are kicked out alternately, the hands are paddled forward and back alternately. There is no com-



Swimming Dog Fashion.

ter, my dear professor, as you found in teaching Miss LeMonde at Narragansett last summer.

Now, when I speak of the breast-stroke as artificial, I do not mean that it is not the best all-round stroke for a man or woman to use, any more than I would not admit that some of the side and over-hand strokes—all highly artificial, by the bye—are even better calculated to gain speed. To tell the truth, swimming is such an ancient science that we have forgotten what were its beginnings and what are its outgrowths. At any rate, whether you call the breast-stroke artificial or not, for we shall not quarrel as to terms, I imagine most people will admit that in their first lessons they found it considerable to think of and to remember practically.

Here, then, is my third positive proposition. Given a certain degree of confidence, very little motion of any kind, and

combination movement; nothing at all to concert, or to think of, except to keep legs and arms paddling slowly under water and (desirably) with the fingers together. A mere suggestion by the teacher will be understood at once by the pupil, and not readily forgotten when the time comes to depend upon it.

Here, then, is the order of exercises. Take your pupil—the most timid woman you know—into about three and one-half or four feet of water; impress upon her the fact that almost any motion of hands and feet will keep her mouth above water. Then show her the dog-fashion movement, and see that she understands it as far as the action of her hands is concerned. Tell her all she needs to do with her feet is to kick them out slowly and alternately. You will be surprised to find how readily she takes to it. Now promise her that you will not let her go under,

and hook one finger in her belt behind. Then tell her to strike out slowly as directed.

Usually very few corrections are necessary, and those so obvious that the pupil at once sees their force and adopts them—again, naturally. The exhortation to take it easy is the one you will have to use most persistently.

When arms and legs are working right, gradually lessen the support, always keeping your promise, until you find no weight whatever on your finger. This will usually take little more time than is enough to assure her that you are reliable, and the moment the result is attained, announce that she has kept herself up without help and make her realize that it is the truth.

After a little practice, let your pupil try alone, standing close by and still guaranteeing that her head shall in no event go under. After several trials—often in one—she finds to her delight that she can keep up and, perhaps, even make you take two or three steps beside her.

The hardest part, which is not hard at all, is now over. Confidence and satisfaction have taken the place of nervousness and doubt. She has gotten to hardly think at all of her stroke: it is so perfectly natural and spontaneous.

The next thing is to walk a few feet away—not too far—and tell her to swim to you. You may have to step forward and hold her up now and then, but if your distance is well chosen you probably will not, and so she sees for herself that she has not only kept up, but made some headway.

Gradually increase the distance. She will probably declare that she cannot accomplish each longer course, but she will do it. She is on her mettle now, and I have seen three women, who declared “they could never learn to swim,” doing ten and twelve-foot heats, dog-fashion, at

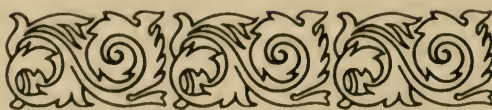
the end of the same hour, during which they had rested and tried alternately.

All of this seems so simple and obvious when it is once told, that I almost wonder at myself for having thought it worthy of writing out. The sole difference between my pupil and those of others is that mine has no stroke to think of; no movement of arms or legs to make, that she will not make naturally. Thus there is nothing but confidence to instill, whereas all the books and the teachers I have seen cling to the practice of making their pupils learn correctly from the beginning: everything at once or nothing at all; a basic difference that must serve for the justification of this article.

Just a word further. There are, undoubtedly, many accomplishments, perhaps most, in which this learning correctly from the beginning is desirable, if not positively necessary, provided one ever hopes to become at all expert. Swimming, however, I submit, stands almost by itself in this respect, for the very good reason that there are really two things to learn instead of one, and the two are totally distinct and far apart. The first is courage and the confidence that you can swim, and the second is swimming in the different styles best calculated for speed, distance, power, and general utility.

The first is attained when the pupil knows that he can keep himself up for a few strokes. This realized, he will learn the second for himself, for he doubtless knows, or can see or hear described, all the accepted strokes; and, having once gotten confidence from experience of the ease with which he keeps himself afloat, his mind is free to really begin practice and to perfect himself at his leisure in the details of good swimming.

There may be people who, even if properly handled, cannot be taught the confidence part in one lesson, but I have not found one yet.



I know of a road
At the edge of the town

I could shuffle my shoes
On the outgoing track—

OUTGOING WAYS.

Lock fate with that roadway,
And never come back.

By Frederick McCormick.

I AM not continually searching for lovelier things, for to me all the world is beautiful. But when the time comes for going back—back to the continuing country, the city presents its least lovely aspect. The mind absents itself from enterprises on such occasions, and all seems to grow still to allow it to think. Out of the poor imprisoned garden come the songs of birds that are miles away. A feeling like unto the perception of a passing storm at night sweeps over, a sea of foliage tumbles in the wind, and you slumber through a dream of tent fastenings and complaining timber.

One serious glance at the little garden reveals unmistakably that the day is hot. The leaves shudder on the wall. The urn, one of those cast-iron ones, seems to consume its little talent of pansies. The walls around the enclosure crowd in, forming a condition something like that of the crater of an extinct volcano pierced by the tropical sun. I often think how much the vitrified city streets resemble those flumes and canyons one sees in the sides of volcanic mountains leading away to verdure and freedom, sometimes through desert suburbs.

In our canyon, cave 59, chamber 2 of the 3d strata, there was a rustle of papers, books and baggage on the day when we set out for the country. There were heard the voices of jubilant lodgers buoyant with song and expectation, followed by the vanishing of luggage, the echoes of departure and the silence of evacuation.

The retreat into the country renews in man the reverence he owes to the world without and about him. It provides for the humble and attentive worshipper communication with the mysteries of being

Leading out of a wood
To a wood going down.

And I think, when, at noon,
In the work-a-day heat,
I am fighting it out
In the strife of the street,

Picture, Text
etc. By
Frederick McCormick.



The road to the
Country.

far beyond his understanding. Nature attunes herself in endless harmonies to every mood possible to man, and "to him who in the love of nature holds communion with her visible forms she speaks a various language." Man alone is perverse in his attitude to creation.

It is rarely possible for the true nature-lover to go amiss in his excursions into the country. Whatever ramble he may take, at whatever season, will afford him all that his observation can encompass, all that his mind can order or his reason contemplate.



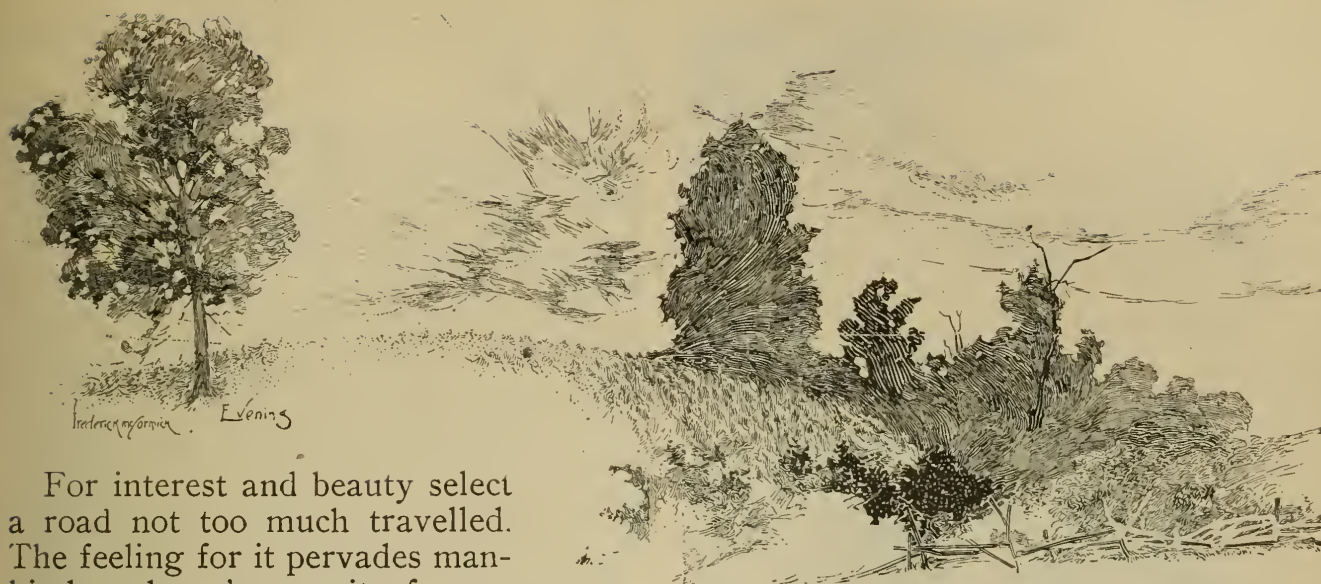
Land of
the lamp-
post

When one sets out in the cool of the morning, threading his way past the very last of the seemingly endless trail of lamp-posts, the load of life is lifted. For my part, I have then no sighs "for the prophets' paradise to come." To see a robin warn and feed its young, to hear a plow-boy whistle, to catch a mole heaving the turf above him, will cure, for me, the most serious problems of existence.

Sometimes I have seen a hay-wagon lost in a city street, countryman, pitchfork, boom and all, and felt an irresistible wish that I might climb upon it, ride out into the hay-field and never come back.

The sight of an old mill, which is just enough of civilization in an otherwise rural place, is enough to turn me to longing. I know of four old mills where, singularly enough, the highway, the railway, and the waterway meet. What a truant from the caravan of progress is an "old mill!" An old loafer, a tippler sitting by his spring, his mint-bed, and his brandy. It usually stands in a bend off the main line of travel, where the water, the birds and the cool breezes visit it.

There will be an old fisherman, too, to keep it company. He will come every morning with pole and basket. The snake-feeder will skim over the mill-race, the water will gurgle in the dam, and the river and the race will join each other a little lower down, without a sound, beneath the willows, and slip away under the bridge, over the ford into the mystical beyond—the beyond where vanish not only waterways, but the highways of fancy, of commerce, of travel, and of life. But let us go into the country in a more orderly manner.



For interest and beauty select a road not too much travelled. The feeling for it pervades mankind, and one's capacity for enjoying it increases with every outing. If you go far enough it will lead you to bridges, walls, arbors, vistas, valleys, and eminences from which you can get magnificent surveys, to all manner of birds, insects, flowers, trees, and small animals. As you go out you will wonder that you ever loved the garish street. There is a continent of by-ways to discover if you have a knack at exploration, and, getting back into the road a little farther on or not, no matter, there is a panorama and a sermon for every waking moment.

The awakening of day and the welcome to the morn is the occasion for a beautiful ceremony by birds and insects. Most of us get out in time to see the bumble-bee bedraggled in the dew, his black and yellow coat glistening from the bath he has suffered to come upon him through his great anxiety to get to business early—and to see the tall trees catch the first rays of sunlight in their top branches, the meadow lark lifting herself high up for a sundip, then sinking again for a good full breath from the fence.

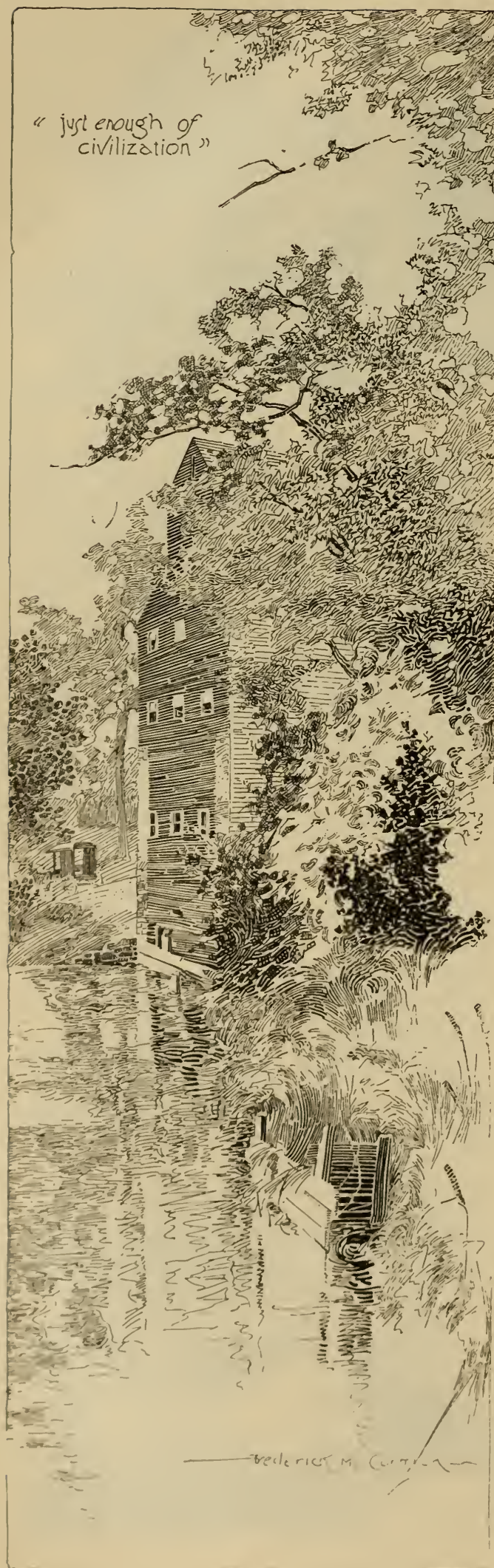
One does not get into full swing, of course, until he has long passed the very last of the urban back-yard artifices. Hills bathing in wind and sunlight, jubilant with the tall grass, serious in the declivities frowning like fortifications, "smil-

ing uplands," are far from the sunburnt caves and pitiable trees swathed in electric wires and stays, and dotted with insulators, or the commuter's sheds where engines split all the solemnity of things.

With me not only the "road to the country" and the longest way around, but the byways, were open secrets in those halcyon days when I knew the woods and fields in hill and hollow, could name the birds, flowers and trees which I long forgot and learned again erewhile; so that now I do not confine myself too closely to the highway. I re-discover the flag pond with its bullfrogs, tortoise and perch, and its spreading alder, the river-marsh where grew the calamus root, where lifted the cat-tail and where swung the Grakle. They bring up recollections of the days of "bow and arrie" glory, pin-hook bliss and whistle rash (measles came too late in life for me).

Across country you see the hunter out with his "long Tom," stalking about among the hickories, motionless at times for long intervals, watching for signs of life in the branches above. I see him fooled by a tree-creeper or a woodpecker. The plow-boy stops in the furrow to make sure the rain-crow is prophesying rain. I know he is day-dreaming, and he thinks of a sweet rest on the hay under the barn





roof, where he can hear the patter of rain-drops.

What most of us prefer in summer, is to be "up some other apple tree," like Riley's June lover, for that is the feeling of the charmed. It is the feeling of relationship to every created thing. I like to keep in close touch with the world without, to renew my love for the microscopic, and for half-forgotten things, to know that I have not lost the swing of the woodman's axe, the laying of the furrow, the calling of the cattle, and, before I repair to the town, I watch again the adoring clouds—turning to their god when he sets—gather in the west where the sun goes down to speed the parting day. When I go home in the twilight I hear the widow call her truant boy—he is another one of us—home to supper and to attic slumber.

To the city denizen, worn and surfeited, the country is a deliverance. It seems strange that by reason of the dark ways of humanity there are great areas where nature is almost entirely transformed and obliterated. I wonder, could the land but think and feel, would it not envy old ocean her resistless power to sweep into doom pretenders to her domain! And how it stretches out into the frozen zone to escape the contagion and pollution of man! In the north its arms are 'round the Pole, and its heart is beating in the caverns of the deep. Man inclines to ravish and destroy the earth, and Providence has fixed, we may believe wisely, less than one-fourth of it for his control. This seems fortunate, for though the land may turn to desolation, the unsullied winds of the limitless seas will bring it back to virginity again.

There is that pitiful inter-region, that quasi-country where man is multiplying and nature decaying, that cancerous tincan and bottle land, goat-run, together with the adjoining and out-reaching beer-garden and artlessly misconcealed *café campagna*. Oh! how that land must sigh for wind, and flood, and fire, or whatever power may release it from its afflictions. That is not country. What we thank Providence for is that great exterior region where the zephyr and the breeze are born, the cave of winds, of waters, and of light, the zone of corn and virtue: for it surrounds the hot and dusty town as the air surrounds the earth, nourishing it and taking it in to rest and regeneration.

A CENTERBOARD CUP DEFENDER FOR 1901.

By Charles G. Davis.

WILL an extreme centerboard craft ever have the honor of defending the *America's* Cup?

There was a time when the whole American nation stood ready to affirm that its shoal, wide craft could outdo in speed any craft of similar size afloat. And even at this day the shoal boats of the small boat classes, where they are fairly pitted against the keel craft,

come out victorious. Light displacement with a light draught have gone hand in hand to victory, as the records of the past season show.

The designers of England, as well as America, believe that it is the shoal, clean-sectioned boat, with a long sailing floor that gives the greatest speed. *Columbia* is an example of this; she is a long, shoal canoe, with her fin keel kept just as thin as practicable to carry the heavy lead keel. Or, to take another example, *Beaver*, a miniature *Columbia*, designed by an Englishman who never saw *Columbia*; her fin is as thin as it can possibly be made. Yet the still shoaler centerboard boat *Genesee*, drawing eighteen inches against *Beaver's* six feet, defeated her in three straight races.

The question is: why should not a similar boat on a ninety-foot water-line beat *Columbia*?

The one undecided element in yacht designing is not the shape of the hull; all are agreed that long, straight lines give the most speed. The one great point in dispute between designers, builders and yachtsmen is the question of how a boat's ballast should be applied to give her the most power to carry sail.

To get the lead as far down as is possible and yet do away with what nature demands, viz., the deadwood between hull and keel necessary to hold those tons of lead, cannot be the right method of ballasting. The "wetted surface" is put just where it does the most harm—deep down where the water is dense and hard to move.

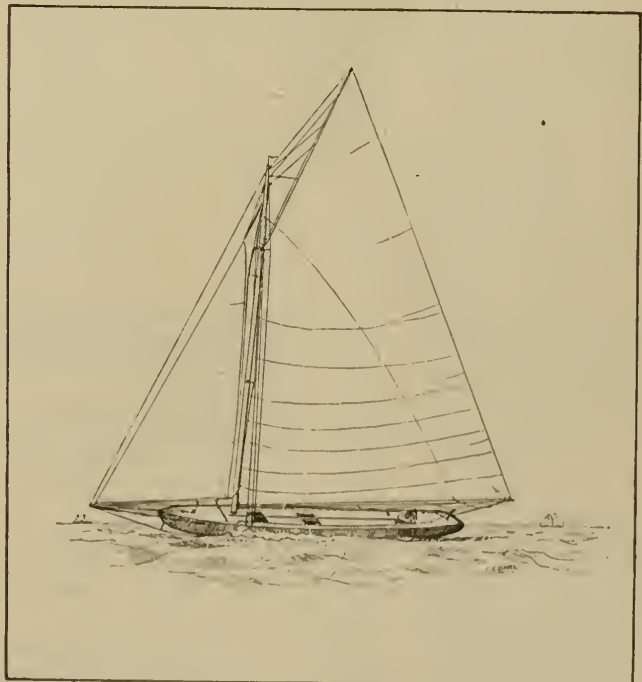
Some designers scheme to reduce its harmful effect on their yacht's speed by making the deadwood out of thin sheets of metal so as to reduce the resistance

and yet get the necessary strength. That is the *bona-fide* fin keel.

Now, let us compare two boats; one narrow and carrying lead deep down on deadwood, the other wide and shallow, carrying her lead inside on the floor.

The first boat, the deep one, we will call A's (to distinguish it from B's wide boat), is forty feet in length, nine feet wide, and the hull alone draws three feet. Without the lead to sink her down and hold her right side up the shape of her bottom is such that she would roll over on her side; while B's boat, forty feet in length, is fourteen feet wide and only draws eighteen inches. Her shape alone being wide and flat, gives her so much initial stability that she can carry her full sail without a pound of ballast.

A's boat without her lead would roll over with her mast alone in her, and it is only when about four tons of ballast is bolted on her keel that she gets artificial stability enough to sail at all. Then, although her skipper smiles with satisfaction at the thought that his boat cannot turn over, she is next thing to it all the time, for the lead doesn't get in its work to any great extent until the boat is heeled. B, by adding two tons of lead, can carry the same sail A can, and his boat stands up straighter and sails faster, having two tons less water to turn aside.



The Proposed Cup Defender.

If there is this advantage in boats of thirty feet water-line, then why cannot the principle be applied to boats the size of *Shamrock* and *Columbia*, ninety feet water-line?

It can be done, and, let us hope, will be done at the next trial races to pick a defender for the *America's* Cup. There are men in this country capable, even now, at the first attempt, of building successfully such a craft.

The keel boat has been tried time and time again and, by carrying ninety tons of lead on the keel eighteen feet below the surface, successful boats have been produced. But how much faster would these same boats have been had they dispensed with, say, forty tons of that lead and obtained their stability, or power to carry sail, by beam and plenty of it. There would be no need then of all the steel plates, braces and trusses now required to keep the ninety tons of lead from wrenching off or weakening the hull.

Then again, although only a few will believe it, the shape of the keel, when made as thin as possible, as all aim to have it, works directly against the lead put on its bottom edge to give stability to the hull.

When the boat is reaching hard, much of the lead put there to give stability is actually being lifted by the pressure of water acting on the inclined plane formed by the flat keel, when laid out at an angle in the water. Fortunately another force comes into play that prevents any disastrous results, and that is the tremendous pressure as she attempts to heel over and capsize. She lays over on to a mighty surge under the lee bow, which increases in volume as the pressure put upon it by the sails and keel increases; but, the more the yacht uses of this pressure to hold her sails up, the less force there is left to drive her ahead.

If you want to see this illustrated, stand in the lee rigging of a keel sloop when she is driving hard with the wind

on the quarter, and then get aboard a beamy sloop under the same conditions. When the hard puffs hit her, and make her fairly fly, there is not that hard leaning over of the craft onto that pillow of water the deep boat leaned on, but a bodily rising up of the whole boat, less pressure under the lee bow, and that pressure scattering the water off in spray alone. I am speaking, of course, of modern boats.

No one will dispute the fact that *Columbia* and *Shamrock* are fast—yes, very fast boats. But are they the fastest for their size that can be built? I say no!

If the shoal centerboard yacht can win in the 15, 21, 25, 30, 36 and 42-foot classes, it can win in the 90-foot class as well; and when such a craft is produced we shall see, not records of thirteen knots an hour, but sixteen and seventeen knots.

The one great "bugaboo" held up by keel boat advocates is the uncapsizability of their boat, and the possibility of a capsize in the centerboard boat. That might have been true of the centerboard boats of the past century, but it is not true of the modern ones, with buoyant topsides and overhanging bow and stern. They are just as uncapsizable as the keel boats, and will stand up and go, long after the keel craft has reached an angle that calls for an application of fly paper to the soles of the crew's shoes to enable them to move about on the slanting deck with safety.

Supposing in 1901 there is another international race and a typical up-to-date centerboard boat is matched against the Britisher's keel improvement over *Shamrock*. Is there an American in the land, whether a yachtsman or no, who would not rejoice if the much-vaunted center-

board boat, something like the accompanying plans, should give the Englishmen a worse drubbing than even *Defender* or *Columbia* did? 'Tis a consummation devoutly to be wished by our yachtsmen.

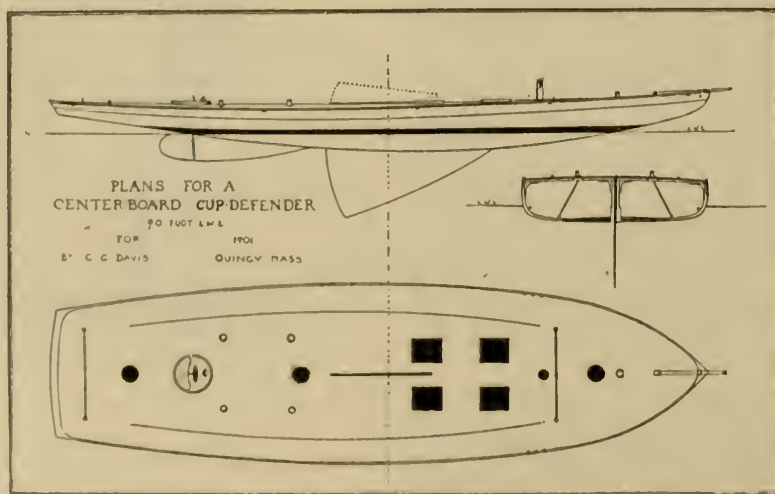




Photo by R. Capes, Chicago.

Wheaton—A Drive for the Tenth Hole.

THE DEVELOPMENT OF GOLF IN THE WEST.

By H. C. Chatfield-Taylor.

A CLUB whizzed through the air—a sharp click—and Charles B. Macdonald drove the little sphere of gutta percha far over the water of Lake Michigan in approved St. Andrews fashion. I looked at Macdonald in amazement, and then followed his eyes in the direction of the Lake. He may have seen the ball, but I would have to take his word for it. That drive, however, started the golf craze in the West.

Macdonald teed another ball and handed his driver to me. I attempted to imitate his actions, and after a series of contortions which would have done honor to the rubber-man in Barnum's side-show, tore up a foot of turf without in any way disturbing the equanimity of the little white object I had striven so viciously to hit. Macdonald laughed, and I said "damn." That was in April, 1892—and I have been saying it ever since.

Macdonald had come up to Lake Forest to lay out a golf course. With supreme contempt he eyed the trees and flower beds, and said the ground would never do. Finally he decided it was worth while trying—if only to give the game a start—and after a few glances about the place, he started out to pace off the holes. And what a course it was! The first hole was eighty yards in length, the longest a hundred and seventy-five. Part of the course was amongst the trees and flower-beds of the adjoining places of Mr. C. B. Farwell

and Mr. John Dwight, and the rest in a small park by the shore of the lake, where a sliced ball invariably went over the bluff and fell some two hundred feet to the beach below; but, such as it was, it had the honor of being the first golf course west of the Allegheny Mountains.

Macdonald did not play that first day. He merely drove a few balls to show me how the trick was done, and drove stakes in the ground to show where the holes were to be. When he went back to town, he left behind a collection of ancient Scottish clubs—relics of his college days at St. Andrews—and a few old balls.

On the following Saturday, Urban H. Broughton, an English resident of Chicago, came up for a visit. He had played—at Sandwich, or some such place—and was keen to have a go at the game. The hole-cups were not yet in place, and it was raining torrents—but that did not dampen our ardor. In a blinding storm, we waded around the nine holes, losing most of Macdonald's balls, and playing the game with the singular modification that holing out meant hitting the stake in the fewest number of strokes.

I have heard vague rumors of some Scotchmen driving balls in Jackson Park, at an earlier date, until stopped by the police—but they were Scotchmen, and they were only driving balls, so I believe that that attempt in the rain was the first authentic golf game ever played in the West.

A short time after, six sets of clubs and the other paraphernalia of the game arrived from Hoylake, and golf in earnest was inaugurated. But all during that summer of '92, the Americans held aloof

experiment were "corralled" by Mr. Macdonald, and the Chicago Golf Club sprang into being. This was in the autumn of '93—too late for the effort to bear visible fruits that year.



Photo by O. B. Brand.

Exmoor Country Club.

from the game. It was left to a few stray Englishmen—enticed to Lake Forest for the purpose—and myself, to uphold the traditions of the game. We played persistently, and the Americans who chanced to pass the little links by the lake, stared in amazement, or, as was more often the case, laughed derisively at our antics.

In '93 it was a little better. But the coming of Sir Henry Wood, the British Commissioner General, to the Exposition, lent a certain dignity to the game—and during that year the Chicago Golf Club was conceived.

Macdonald, who had never thoroughly approved of the unassuming efforts of the Lake Forest golfers, had been casting about for a place where it would be possible to take a full swing without over driving the hole. Finally he discovered an Englishman with a farm of meadowland. The Englishman was J. Haddon Smith, the step-father of Miss "Johnny" Carpenter—the well-known player—and the farm was at Belmont, a suburban way-station, about twenty miles from the city.

Meantime, people had begun to hear of golf, so, with the assistance of such Scottish experts as James B. Forgan and Herbert and Lawrence Tweedie, a few Americans who were bold enough to try the

After two seasons of ridicule and stray Englishmen, I became quite convinced that something must be done to lure the Americans of Lake Forest into the game. Early in the spring of '94, I developed a deep-laid plan to encompass their ruin. Lake Forest was a temperance town, and Scotch whiskey was an unknown quantity. So, with malice aforethought, I invited some ten or a dozen of the younger residents for a game of golf, one Saturday afternoon. They came—scornful, of course, but well-mannered enough to conceal their contempt. Golf clubs and balls were deftly distributed by Broughton and myself, and they were started to their doom in pairs. When they came in, hot and tired, I lured them to the dining-room, where decanters of Scotch whiskey were placed enticingly before their innocent eyes. Alas! they fell, to a man. Whether it was owing to the game or the whiskey I would not venture a guess—but on the following Saturday the number had doubled, and from that day to this, except on Sunday, golf has flourished at Lake Forest.

On the Fourth of July, 1894, we held our first handicap. Reginald de Koven won it, playing with a metal putter. He is left-handed, and we had no left-handed

clubs. The putter faced both ways—so, nothing daunted, he ventured forth with that. While others tore up the turf in vain efforts to drive, or sliced their balls in the lake, he putted persistently, and, tortoise-like, distanced the hares of cleek and driver. A novel feature of this day was Major-General Nelson A. Miles and his staff, in full uniform, following the players on horseback. Even in those days we drew a distinguished gallery.

Meanwhile, the rival community at Belmont, with Macdonald and the Tweedies as preceptors, had been learning a thing or two, and as they had the advantage of Sunday play, a course which at least had distance, and real Scotchmen to spur them on, they thought the Puritans of Lake Forest would prove easy marks, so Lake Forest was invited to Belmont for a team match—the Scotchmen, of course, being *hors concours*. We played four men a side. Lake Forest was represented by F. C. Farwell, H. N. Tuttle, Scott Durand and F. C. Aldrich, the Chicago Golf Club by E. I. Frost, E. W. Cramer, Gustav Wilmerding and Stuyvesant Le Roy, Jr. Alas! for the vagaries of golf. Are any of either team in the first flight to-day? But it was a glorious match—the first three pairs all even, and the match won by the Chicago man of the last pair. The

thus encompass their ruin, placed Scotch whiskey before them at luncheon. Three fell from grace, and they halved their matches; one remained faithful to his principles, and lacking the true inspiration of the game, he lost his match, and brought defeat to his club. Since that day there has never been any Scotch question at Lake Forest, except as to quantity.

For the return match Lake Forest was confident it had the easy end. Flower-beds and trees would be certain to ensnare the Belmontites—but, over-confidence has been the ruin of many a sportsman, and when the score was figured the Chicago Golf Club was so many up that an adding machine was brought into use. Tuttle being the only winner for Lake Forest.

One result of these team matches was to wean the Lake Foresters from their trees and flower-beds—the private course, and, it might also be added, the private bar were no longer sufficient to satisfy the cravings of the town for golf. So the following year saw the formation of the Lake Forest Golf Club, with a membership of a hundred and fifty, and a good, nine-hole course, on the farm of the late Leander J. McCormick, where the holes were of sufficient length to call for an occasional brassie stroke.

The same year ('95) the Chicago Golf



Photo by Chas. Allgeier, Chicago.

Midlothian Country Club House.

reason for the loss of the match was again Scotch whiskey. The wily Chicago men, thinking to entice their Puritan brethren from the straight and narrow path, and

Club moved to its present home at Wheaton, Ill. The first open tournament was held. Willie Dunne, Lloyd, Tucker, and other professionals, were brought on from

the East, to show how the game should be played, and last, but not least, Charles B. Macdonald brought back the Havemeyer cup from Newport—thus winning for the West the first American championship held under the auspices of the U. S. G. A. It was Wheaton's year, but Lake Forest was not to be outdone so easily. The nine-hole course and the two-room club-house of the Lake Forest Golf Club were but stepping-stones.

During the winter the Onwentsia Club was formed, and in '96 Lake Forest boasted of a full-grown country club, with golf, polo, tennis, and a membership of three hundred. The days of the flower-beds were over, and the quiet, Puritanic

ship at Shinnecock, it was not safe for a Lake Forester to venture in the wilds of Wheaton unarmed.

But those days of rivalry are over. Wheaton and Lake Forest are now the best of friends, standing together against all comers. Nobody knows and nobody cares who wins the team matches, except the players themselves, and the membership of the two clubs is so interwoven that it is only a question of convenience where a man plays. When there were but two clubs, the rivalry was natural and beneficial, but in recent years golf courses have sprung up so fast in the West that it would require a feat of memory to even record the names. Every station, nearly,



Photo by R. Capes, Chicago.

Glenview Club House.

village had become a community of sportsmen. That year of '96 was, in the parlance of the streets, the "fiercest" year golf has known in the West. Chicago society was divided by the rival camps of "Wheaton" and "Onwentsia." The Red and White of Wheaton, and the Blue and Yellow of Onwentsia were worn as hat-bands and ties, and the feeling ran so high that families were divided, and the members of the rival clubs were scarcely on speaking terms.

When H. J. Whigham joined Onwentsia, and became its Captain, thus giving Lake Forest a champion to rival Macdonald, open war was declared, and the team matches between the two clubs became bitter contests, watched with breathless anxiety by partisans of both sexes. When Onwentsia won the series, and Whigham won the Amateur Champion-

on the Northwestern Railway, has its golf course, and the last is yet to come.

In '96 the Illinois Golf Club, under the captaincy of Herbert Tweedie, was formed and took possession of the old Belmont course. In '97 the Exmoor Club was organized at Highland Park, as a neighbor of Onwentsia. In that year the Amateur Championship was played at Wheaton, and entries were received from but three Chicago clubs. Last year, at Onwentsia, six clubs were represented by thirty-four players, and seven Western clubs outside Chicago by twenty-three players, while at Newport in '95 Charles B. Macdonald was the only Western representative. In '95 there were but three golf courses near Chicago, with but one eighteen-hole course. Now — but five years later—there are twenty-two clubs, and six eighteen-hole courses within thir-

ty miles of the city. The Chicago Golf Club, Onwentsia, Glenview and Midlothian, all have memberships exceeding two hundred and fifty, while each maintain an eighteen-hole course, fully six thousand yards in length, and a club-house comparable to the best of the Eastern golf clubs.

Chicago has, of course, been the centre of Western golf, and golf was played here several years before it was known elsewhere in the West. Milwaukee was the first city to fall in line, but now the golf craze has extended, not only to the large cities, but the smaller towns as well, and there is almost a continuous succession

to them as does nothing else. They can play one day a week, or seven, and take just as much, or just as little, exercise at the game as their tastes dictate. If one might venture a prophesy, it is that the golf craze will last in the West longer than in the East, as golf fills here a distinct requirement, in many ways peculiar to the community. It has been the means of getting Western men in the open air, for the first time in the lives of most of them, and they are going to keep on golfing until somebody invents a better game which does not demand greater activity or more endurance.

With the exception of the Scotchmen



Onwentsia Club House.

of golf courses from Pittsburg to Seattle. The Western Golf Association, formed last year, membership in which is confined to clubs in the U. S. G. A., situated within 500 miles of Chicago, musters nearly thirty clubs, and at its first tournament boasted an entry list of eighty-seven players, representing fourteen clubs.

But all this is merely dry statistics. It is sufficient to state that golf has conquered the West as has no other game. Western men are business men, who have not the time or energy to devote to tennis, racquets, hunting, polo, or other games requiring athletic training. Golf appeals

and the college boys, the average Western golfer is less adept than his Eastern contemporary—not from lack of incentive or skill, but from lack of time in which to practice. Owing to climatic conditions, the courses open later and close earlier than in the East, and the average golfer can get in but two or three rounds a week. If the average skill in the West is not equal to that of the East, the enthusiasm of the Westerners for the sport excels that to be found elsewhere, and golf has come to occupy in the West a place which has never been equaled, or even approached, by any other amateur game.

IGORROTE RUNNERS OF LUZON.

By William Dinwiddie.



ONE hears, with open-mouthed astonishment, that an Igorrote carrier of Luzon, in the Philippines, will pack on his back two five-gallon cans of petroleum, weighing together eighty-four pounds, and carry them from the seacoast at San Fernando de la Union up the mountains, thirty-five miles, to Trinidad, 5,000 feet up in the clouds, for the sum of thirty American cents. Eight and one-half mills for carrying eighty pounds a mile,

and feed oneself in the bargain; or less than one cent per mile for a hundred-weight, carried up most precipitous mountains and over frightful trails! These carriers can make the trip in one day, of fourteen hours, of the heaviest sort of labor which the physical system can be subject to, and still, in spite of their meagre diet of sweet potatoes and dried fish, they finish in comparatively fresh condition.

Well may the American laborer, who cries now against the heartless oppression of labor by capital, though he receives more wages for shorter hours than any race on earth, war against any possible introduction of Oriental cheap labor into the United States—men who will do the work of a horse for ten cents a day, and live like an animal, in their simple needs, on rice, potatoes and fish for food, with a breech-clout for clothes, or in such luxurious garments as cotton pants and a shirt whose tails flutter in the breezes of the tropics.

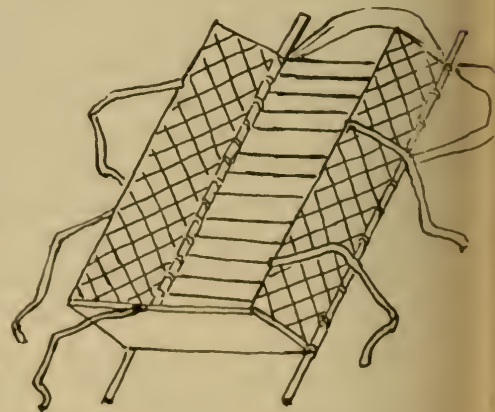
On the other hand, the white foreigners of the Philippines are lamenting the fact that the Americans are already ruining the people by an excessive increase of wage; a procedure which they prophesy will ultimately result in the financial ruin of those who already have capital invested, as well as every American investor who follows. But for all of their croaking the American belief in a fair wage for fair labor, which increases the purchas-

ing power of the laborer and brings a concomitant increase in his necessities and consumption, will be found to hold perfectly sound in the Philippines, as it has in the Hawaiian Islands, where agricultural labor receives the highest wage on earth, and where the giant sugar industry, under American high-pressure methods, is paying magnificent dividends to the capitalist.

But all this has nothing to do with the fact that the Igorrotes are a remarkable race of long-distance burden-carriers and runners.

The "riksha" coolies of Japan, China and India are often pointed out as examples of what training will do in enabling men to keep up long-sustained exertion, even in the tropics, but the truth of the matter is that their running between the shafts of a light two-wheeled cart, dragging a passenger over level roads for five or six miles, at the end of which the coolie becomes exhausted, is child's play compared to the feat of carrying a seventy-five pound pack on the back, up steep mountains, at the rate of three miles an hour, or traveling fifty miles a day as messengers in a region which has hardly a level foot of ground, and whose mountains rise and fall, from backbone to backbone, several thousand feet.

As specimens of physical development, the Igorrote men are almost to a unit fine; and when our troops first came in contact with them, when they were madly chasing Aguinaldo and his fleeing warriors all over the northern end of Luzon, every one exclaimed in admiration at the stature and wonderful muscles of these naked savages, who, without fear, quite naturally took up the burdens of the white man, for pay, with more willingness than they had carried those



The Chu-gee, or Carrying Basket.

of the Filipinos previously, for nothing. The women, as well as the men, are bundles of muscle, but, as they are shorter of stature, and bulging muscles are not coveted as a mark of beauty in femininity, they are, as a class, very repulsive looking.

The basket for the men, known as a *chu-gee*, is a framework consisting principally of a strong back, rectangular in shape, made of split bamboo or hard-wood splints, about sixteen inches across and thirty inches high, which fits on the back, projecting at its upper end above the nape of the neck, while the lower end rests

To complete this simple device, narrow wings or side-flaps, and a bottom piece are added, which are drawn up against the load, as retaining boards, by the thongs which lash the contents in when a pack is being carried, or are folded in flat on the center and out of the way, when it is carried light. The uprights on each side of the rectangle are usually permitted to extend downward and upward for some distance, the one for the convenience of halting on the trail when the packer squats down and rests the points on the ground behind, slipping a short,



Resting on the Trail.

well down on the spine. To this framework is fastened, about a third of its way down, tied on each side forming a single loop, a heavy carrying-band, made usually of dried and beaten Manila hemp. It is passed over the upper point of the forehead and ordinarily sustains most of the weight of the load. There are, however, two other bands, springing from each side, which pass under the arm and over the shoulder, so that when the carrier's neck becomes tired, he rests these muscles by throwing his head back and letting the strain come on the shoulder-straps.

forked stick into the load as a prop or third leg if he leaves the load altogether, and the other as an extra means of relieving tired muscles by raising the arms above the head, with the stick reaching from hand to hand, and catching it at the back of the projecting upper ends. This machine fully serves its purpose of carrying a maximum load in the most advantageous position, and with the greatest number of changes, to ease the strain.

The Igorrote gets into this load by propping it up slantwise on the ground, with the short forked stick he always car-

ries as an adjunct, and then sits on his heels, wriggles his arms through the shoulder straps, and pulls the big band over his forehead, tips forward on his toes, thus prying the load off the ground,

portion of the Igorrotes follow this line of work as an avocation — begins very early. Youngsters of eight or nine years follow the long line of trotting bearers from their mountainous homes down the



Among the Great Pine Forests of Bengult District, 5,000 feet Altitude.

and rising slowly to his feet. He may, at the start, readjust the head-band several times until he has the load balanced on his particular pet vertebra, but, once ready, he can stride forward all day long, climbing fearful hills with but a few minutes' rest at long intervals.

It will be seen that the load in this position soon gives him, to begin with, enormous neck muscles, and the great strain brings the muscles of the chest into play until they are swelled out like iron. The bands around the shoulders also develop the chest and abdominal muscles, and, when he bears some of the weight with upraised arms on his stick, the biceps and forearm muscles come into action. Being essentially a man of the mountains, the perpetual climbing beneath these heavy weights amazingly develops the calves, thighs and back muscles.

The training for carriers—for only a

tortuous trails to the far-away coast and then home again, possibly carrying, if anything, a small bundle of food. As soon as they are hardened sufficiently to stand the long marches, they are furnished with, or make for themselves, little *chu-gees*, and are given small packages from time to time.

Every pound of food and merchandise which goes into these wild mountainous countries, is packed thus on the backs of men, as well as every pound of the coffee, tobacco and hemp which comes out. It strikes one as odd, at first, that the little mountain horse, which is bred in great numbers and is a handy little beast, is not used as a pack animal, for one sees them everywhere, with bow-legged Igorrotes astride, racing up hill and down, climbing winding steep trails like goats, or letting themselves down dizzy heights in buck-jumps: but a trip on the back of one

of them for thirty miles, with a 5,000-foot rise thrown in, convinces one of the truth of the Igorrote assertion that a pony can only make such an expedition once in ten days and keep in good condition, while the human beast of burden can go on, day after day, in perfect comfort, until disease or old age overtakes him.

The Igorrotes are a blessing to the American army, who are holding many of the past eyrie strongholds of the insurgents, for without their aid it is extremely improbable that we should be able — as we are now slowly doing — to exterminate the insurrection, root and branch, by tirelessly following every small band of Filipinos which makes its appearance, over the miles and miles of ordinarily impassable country. The native carriers keep the garrisons supplied with ra-

the often-aimless foot-races, the Igorrote goes as bearer of supplies and camp equipment.

The great hardships of some of these marches, where we have already penetrated into territory never visited by Spanish soldiery, cannot be exaggerated. Among these hardships may be noted following sinuous trails over the curving ridges of gigantic mountains, up and down thousands of feet, and again and again; the little columns traveling in single file, always watchful that an ambushade does not take place, have actually had to climb up rocky paths on their hands and knees, dragging themselves up by projecting bowlders. It is easily imagined what tremendous exertions the sinewy Igorrotes make, loaded down with heavy packs, when the best an American soldier can do



At Home in the Igorrote Country.

tions by traveling back and forth from the coast depots, in strings a hundred strong, accompanied by small guards of soldiers, and when an expedition starts out through the mountain wilderness in

is to carry his gun and a hundred rounds of ammunition.

The pay given these natives for this work is so much better than anything they have received before, and their con-

fidence in the fighting powers of our men so supreme, that any number of them are anxious to volunteer for any march. These scouting parties are most unique. Fifteen or twenty soldiers (absolutely fearless and with utter contempt for death), with an equal number of the carriers, may start off for a two-hundred-mile march at the rate of twenty miles a day. Half of the armed men lead the advance, the Igorrotes—nude, barring their breech-clouts—are placed in the middle, and a rear guard of soldiers follow; all the travel is done in

tail came to light in one of these mountain garrisons. It seems that one company of soldiers had so entirely worn out their foot-gear, that a requisition was sent in for shoes for the entire number of men. It is said the official papers passed under the eagle eye of the Governor-General—who spent sixteen hours a day striving to save a dollar here and there, while the great problems lapsed and the inevitable delays which followed cost thousands of dollars more — and he promptly cut it down to twenty-five pairs, or a fourth the



Igorrote Market Women.

single file, perforce, as this formation makes it possible to turn either to the right or left to face an ambushed enemy. At the end of a ten days' march, three-fourths of the soldiers will come swinging into camp, with hardened and sun-burned flesh showing through a dozen rents in their kahki clothes, and most of them will be barefooted, for the government contract shoe was not made for anything but tin-soldiering.

An amusing instance of General Otis' economy and close attention to petty de-

number needed, probably on the assumption that a regimental quartermaster will always ask for more than he needs. The result of this penuriousness was a barefooted garrison hobbling around for several weeks, two hundred miles away from the Manila depot, anxiously waiting for sufficient shoe-leather to protect their feet.

It makes no difference to an Igorrote carrier where he sleeps. On long marches, when the failing sun bids him camp, and the chilly night air of these high altitudes begins to blow, he lights small camp fires,

and as the brass pots, of water brought from the nearest spring, begin to bubble, he heaps in his rice or sweet potatoes, and then contentedly hugs the fire, drawing his only garment—the *katap*—a cotton shawl which he wears at night—over his back and head. They make weird little groups, with the loaded *chu-gees* stacked up in circles around them to break the force of the wind, while they squat close to the glowing embers, their shiny skins, and tousled heads ruddily lit up by the flames.

After the meal — which they eat with their hands, from the common pot — each man produces a little hand-carved wooden pipe, and stuffing it full of very bad tobacco, pulls away with perfect satisfaction to himself and great distress to the white man. For an hour or so they laugh and chat away with an animation seeming hardly possible after the tremendous labor of the day, and then, one by one, sink to sleep with their heads pillowed on their arms and all curled toward the welcome warmth of the fire.

The writer had a cable dispatch he wished to send in to the nearest military telegraph office, fifty miles away in the interior of Luzon, and, for the really fabulous sum of one dollar, the Igorrote runner selected promised to carry it through at full speed. He was sent away at two o'clock one afternoon, and—not knowing that he would not, with a primitive man's superstition, travel at night—it was supposed he would keep straight on to his destination; instead, however, when darkness overtook him a little after six o'clock, he turned in with some camping friends, slept the night through, and finished the trip by one o'clock the next day, or fifty miles in twenty-two and a half hours, with a good night's rest of ten hours to boot.

It is said they can do some remarkable distances between sun up and sun down at a sustained gait of something like six miles an hour, and it is a known fact that these friendly Igorrotes, who are so useful to the army as carriers, but who furnish them with no information as to the whereabouts of Filipino insurgents, do some great feats of sprinting in front of our moving columns, carrying the news from village to village that the Americans

are coming. This little pleasantry of theirs may account for the difficulty the army has had in ferreting out the armed bands of guerillas who now infest the mountainous regions, and also may be the reason why it has been impossible to locate certain prominent Filipinos (Aguinaldo among them), whose presence is much desired in Manila, but who, so far, prefer the salubrious atmosphere of their selected mountain resorts.

The Igorrote woman performs an equal share (if not more) of work with the men, but, as a pack animal, she carries a device of her own in the shape of a round basket, slightly tapering toward the bottom. It is carried in much the same way as the *chu-gee*, but has only the band which passes over the forehead, without the auxiliary shoulder-straps. Throughout the entire mountain districts one meets droves of these little, muscular women (who are apt to dart off the trail to protecting underbrush in their timidity at meeting with white strangers), struggling along under immense loads of camotes or sweet potatoes, destined for some village market.

Around the garrisons they now come every morning, a score or more, traveling in single file, almost bent double under the heavy baskets of the long, red tubers, or else heaped high with the red-striped mountain rice, each and every one anxious to sell the products to the Commandante Americano, who has so much money. After the baskets are empty, they sit huddled together outside the post building, eying with excessive curiosity the queer new species of man who has come to their land, and actually pays them money in place of demanding and seizing by force their produce, as did the Spaniards, without compensating them.

They are an odd, sturdy race of burden-bearers, who practice infanticide on all the weaklings, and kill one of twins. One who has been in their rugged country will never forget them, nor cease to hear the high-keyed rasping songs which echo through the immense pine forests, coming from the throats of a hundred pack-carriers, as they swing rapidly along under their loads, over rocky hill and dale, in a long, sinuous, moving line.

THE SPORTSMAN'S PHOTOGRAPHIC EQUIPMENT.

By W. E. Carlin.



NATURAL history photography is intensely interesting and valuable in itself, and it soon cultivates an interest and love of birds and animals, the outcome of which is a desire to protect them wherever one can. I remember in my early shooting life the number of little creatures that were

sacrificed merely to have a mark at which to try my rifle. On my last trip into the mountains of Idaho, where we were in camp for five months, I used my gun but twice, and then only because it was necessary to secure fresh meat.

The sportsman's outfit can no longer be considered complete without a camera, to record interesting incidents and bits along the trail and in the fields; while, to the naturalist the modern photographic appliances have been a veritable boon, in that he no longer is obliged to rely on the skill of others to produce his illustrations.

Almost any of the handy little cameras which flood the market will do very well for mere impressionist notes of a sportsman's trips. It is when one has to consider the apparatus and methods best suited to the needs of the field naturalist,

intent on scientific exactness and clear detail, that one is confronted by an array of styles and patterns, most of which are not at all suited to his subjects.

After several years' work, I have made up my mind that, considering all the pros and cons, it is better to work in the field with small rather than large size cameras, 4 x 5 for choice, although if one takes nests and eggs only, a 5 x 7 may do as well. With the larger instruments, the extra size and weight are a disadvantage. There is also a good deal of waste, for it is difficult to fill the large plate without showing distortion of image, while the smaller image may be enlarged to almost any practical size without appearing coarse.

For field work, I should select two boxes, both of 4 x 5 size. One a long focus folding box, to be used for photographing nests, and for a set camera with a long focus or telephoto lens, and for time exposures. The second box should be on the twin lens or reflex principles, for use on big game or small mammals and birds, when it is often desirable to focus in full size finder up to the instant of exposure.

The twin lens box is made as a hand or tripod camera, the former having the finder at the top, and the latter at the back; both are very useful for photographing in zoölogical gardens, or when the subject is in confinement. Their disadvantage being bulk and the inability to use lenses of different foci—unless it be a special, very expensive pattern.

The reflex has but one lens, which, by



A Family of White-bellied Nuthatches.



Red Squirrel.

the aid of a mirror, answers as the finder lens with almost instant exposure. The disadvantages of the reflex are, that, as a focal plane shutter is used (the most useful exposures)—those from one-quarter to one-tenth of a second are the most difficult to obtain—besides this, the reflex, as made at present in this country, is not well suited to the requirements of the naturalist. I have one, made specially for me, which is very convenient, allowing the use of lenses of different foci, the shutter arranged so that slow automatic exposures may be made without difficulty.

The next important item is the lens. For a 4 x 5 plate, I should choose two lenses, one of about 7 or 7½-inch focus, and one of from 14 to 20 inches focus. The former will be the most used, and it should be an anastigmat of an approved make, working at as large an aperture as possible. There will be times when this extra speed is very necessary, while for ordinary use it may be stopped down as you think best. The longer focus lens is often useful when one cannot place the "slit" camera near the subject.

The telephoto is really a necessity. This lens consists of a positive or collective element and a negative or dispersive element. The advantage being that with only a moderate length of bellows, one has a lens of very long relative focus which makes a large image—under ordinary conditions, from four to ten times the size produced by using the positive lens alone.

These lenses are necessarily slow-working, and rather difficult to focus accurately. Still, it is quite possible to make snap shots with them in good strong

light. Snap shots in sunlight give fully-exposed negatives on a very rapid plate.

The shutter is another very important item. Most shutters are too difficult to spring when using a long tube, and make too much noise in working. A very slight click is often enough to cause a spasmodic movement in such animals as squirrels, chipmunks, mice, etc.

One will need tubes of several lengths—the longest should be from 50 to 75 feet. The bulbs for these long hose may be gotten at a rubber store, by cutting the nozzle off from the bulb syringes used for watering plants. The long tubes are necessary, as one has frequently to screen the cameras and retire some distance to hide.

Besides the regular tripod, one should provide one's self with a short-legged one—say 18 inches high. This will be found very useful when photographing objects on the ground—such as snakes, etc. Another necessary little item will be a stout screw, or clamp, to fasten the box to the limb of a tree.

Photography has some serious limitations, but, for that matter, so has "drawing as she is drawn" sometimes—especially when applied to birds and beasts.



Young Grackee.

Photography carefully applied, is capable of giving good drawing of form, and characteristic pose and action, while not infrequently the life and individuality of the subject is caught. One cannot study birds and animals without being struck by the individuality which is distinctive, both to the young and old of each species. This is, I think, why so many of the drawings of birds and animals fail to strike us as natural. The form may be there, but expression and character are too often lacking.

Among my illustrations is one of the pika—that curious and interesting little mammal which makes his home in the slide rock in parts of Idaho and Montana. Dr. Merriam has found them up to elevations of 11,000 feet, while I have encountered them in slides as low as 3,000 feet. The full-grown pika is about six inches long, and resembles both the hare and the rat in some of their characteristics. They live in families, or small colonies, in some mass of slide rock, where they have one



Little Chief Hare—Pika.

or more common store-houses in which they pile their hay for winter's use.

At the higher altitudes, their homes are under many feet of snow for six or seven months in the year, but in the lower valleys I have seen them running about on the snow all winter.

Their movements are eccentric and jerky, and they can

run over the broken slide rock with incredible swiftness for so short-legged an animal.

When gathering their hay (*genum-rassii*), they work like beavers, hurrying out (after casting a cautious look around for hawks and other animals) to their grass patch; they cut a large mouthful, which they pile in a sheltered place to dry, to be, in turn, stored in one of their barns.

Their cry is a spasmodic and shrill K-E-E-E—rather long drawn out, and generally thrice repeated. You will find them lying lazily about in the morning and late afternoon on some favorite point of slide rock. When you have found a



The Franklin Grouse on Its Nest—A Telephoto Exposure.

sunning place, go to it about two o'clock, and focus your camera on the spot the pika usually occupies—screen it with weeds and boughs in an inconspicuous manner, and retire to the end of your 50-foot tube to await the coming of your game.

All this sounds quite simple. I worked on and off for six weeks, obtaining during that time three fairly good portraits of the pika. I would also suggest a pipe and plenty of tobacco, as the mosquitos and gnats are usually plentiful.

Another illustration, that of the Franklin grouse setting on its nest, is an example of telephotography. While hurrying home one evening, we made her acquaintance by accidentally kicking over her nest, and breaking one of her seven eggs. The next day we returned, but she was too wary to allow us to make any decent picture of her. As she was close to our camp, we visited her nest for a while every day, soon gaining her confidence, so that on the sixth day we made several large photographs with the ordinary lens placed not more than eighteen inches from her.

This telephoto plate was made at about ten feet distance, using a small aperture, and giving one and one-quarter minutes' exposure. The nest being in the shade during this exposure, the bird did not even wink her eyelid, so far as I could see.

The "white-bellied nuthatches" are a family raised in an old apple tree back of the farm-house where I photographed last year. When the parent had her complement of eggs, we took out the nest and photographed it, and carefully replaced it. Later on, we got photos of both the parent birds, and, from the time the young had down, we took a plate of them every few days, so that when they came to leave the nest,



Nest and Young Vireo.

the whole family stood in no awe whatever of us. The six young birds on the limb are taking a little preliminary exercise before leaving their home for their first flight. The other illustrations are examples picked up in much the same way on one or other of my many outdoor tramps.

One requires a large stock of patience and some ingenuity to succeed at this work: A knowledge of the habits of the subject is also almost necessary, but this will be learned by any one who is at all watchful. The beginner is apt to be a lit-



A Young Warbler.

tle careless. When taking a nest of eggs—for example—the image on the ground glass should be looked over carefully—if any twigs are in the way, or out of focus, cut them out; remove any leaves that do not help the composition of the photograph; in fact, study the whole arrangement carefully on the ground glass before exposing. Do not tip the camera too much in order to show the eggs. It is better to place a little dry grass under the eggs, and thus elevate them sufficiently.

All this care cannot be applied when photographing living objects; and unpleasant and disturbing details are sure to get in. These can, as a rule, be removed in printing, by adopting a plastic process, such as platinotype paper developed by a brush—it is often advantageous to make an enlarged paper negative, on the back of which much of the superfluous detail can be stamped out.

I have made no mention of plates, as every worker has his favorites.

For a developer, I use metol-hydro in proportion of 70 grs. metol, 5 grs. hydro; or, better still I have found glycin. It gives rather cleaner and clearer cut negatives, and plenty of detail and softness.



Long-eared Owl.

It has taken the photographer a long time to enter into the field of sport fully equipped to secure satisfactory results as the reward of his still hunting with the camera. The beginnings, indeed, are so far off as to be almost unknown to the present generation of photographers, for it was the invention of the dry plate, in the now far off days, that really began the path by which all further progress has been made. So long as the operator had to carry with him his portable dark room, it would have been impossible for him to have attempted to invade the sanc-

tuaries of nature, where dwell the attractive subjects that now yield so rich a harvest.

Improvements in lenses and mechanical devices in shutters which in speed outstrip the arrow-like flight of the swiftest bird, and enable the most intricate and rapid motions to be caught, followed in due course; but it was not until the Tele-photo arrangement was brought into practical use that the photography of wild, animated nature could be said to have been fully accomplished. That does for the naturalist afield what the microscope does for him in the study.



White-tail Deer.

SURF BATHING

BY FREDERIC J. WELLS.

Z. H. WARREN—AFTER PHOTO. BY LANGIL.

OF all the exhilarating and health-giving forms of out-door exercise, surf bathing takes its place well in the front rank. It calls for a combination of strength, endurance and good judgment, and has just that little spice of danger which is the true essence of all sport.

It is an art, however, which should be studied carefully, for, with all his attractive features, Old Ocean is a creature of moods and can make it at times very uncomfortable for the best of us, and dangerous to the uninitiated, if he be not approached with respect. This article is written with the intention of pointing out certain conditions existing along our beaches, and to make some suggestions which may prove useful even to the expert.

Not so many years ago surf bathing was rare outside of a few popular sea-shore resorts, and a good surf swimmer, male or female, was even rarer. But to-day the life-line and raft are familiar sights from Coney Island to Amagansett, and from Seabright to Cape May, not to mention the hundred and one other bathing beaches on our coasts, South and West.

This, no doubt, can be ascribed to the more general practice in recent years of all branches of athletics, and to the national tendency of reducing all forms of sport to a science. The increase of swimming tanks in athletic clubs is more immediately responsible, however, where the swimming instruction given boys in the winter, is quickly imparted to their sisters in summer, and a few season's experience does the rest; so that to-day pretty nearly every shore colony has its little band of enthusiasts on intimate terms with Father Neptune.

When you take your departure for the beach, probably the last word of warning

given you has been to look out for what is called along the Atlantic shore—the "sea-puss." This is no imaginary danger, and on some occasions, notably after a storm seaward, it needs to be understood before you take liberties with it. It is really a strong set of tide along the beach, and is caused by a prolonged and steady blow.

This strong set, or current, will cut out the sand and re-deposit it, in most cases, some few hundred yards out to sea, making what is known as the outer-bar, a common formation in these waters. Between the coast and this sand bank the water rushes like a tidal river, making a cross sea that is very tiresome, and where the beach shelves quickly, as, for example, at Southampton, L. I., it causes with each receding wave an undertow that is dangerous, if one is not prepared to withstand it.

After storms, do not go in unless you are sure of yourself, and particularly do not invite your women friends to go with



Fig. 1.



Fig. 2.

you. They can get all the fun required when Old Ocean is in a less boisterous mood, and it might happen that the services of the life-saver would have to be called upon.

If you are determined to go in yourself, do not stand inside the line of breakers, but take your header through the first one, and swim fifty feet or so under water. This should bring you close to the inner line and into deep water. Then look backward over your shoulder and take a range mark on the shore, which will soon make it evident what way the tide is setting you.

As you would probably be glad to return to the spot from which you started, you must allow for this leeway by steering a diagonal course in going and coming in, against the set, which, provided it be not too strong, should land you at the desired place.

If, however, the set should be stronger than you bargained for, do not try to stem it, but make the best of your misplaced confidence and swim with it, heading steadily all the time toward the beach, and landing, perhaps, considerably farther up, but safely and in good order. It is when placed in this position that the inexperienced swimmer usually makes

trouble for himself and others, whereas a little cool thought and judgment would bring him ashore unassisted.

It will not do to overlook another obstacle to complete comfort in making a landing, viz., the inner line of big breakers that roll in, looking hungrily for victims. I am entirely unable to explain the why, but the fact is that the biggest rollers follow each other in threes, leaving an interval between: this is the swimmer's opportunity. In all cases, these big fellows are easily seen from a distance, and on the last one of the three, and just behind it, make your effort to get a foothold. But be sure to get behind the break—otherwise disaster will follow when a surf is on, and the sand is harder than one might think—to say nothing of the loss of dignity that ensues.

Conditions such as these are only for the strong and expert, and do not permit of the fun and enjoyment to be found on a day when an off-shore wind and a good steady ground swell makes conditions of bathing to which you can invite your sister's friend to accompany you, even though she be not as expert as yourself. It is well,

however, to have it understood, at starting, that it is not necessary for her to hold

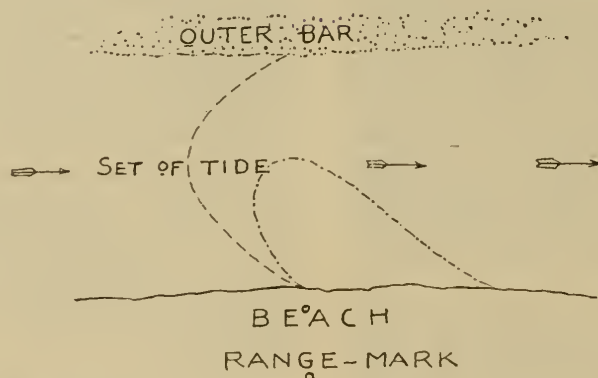


Fig. 3.



Fig. 4.

work. You should wear a close-fitting sleeveless shirt, and trunks cut off above the knee, in one or two pieces, the former for preference, and a light but strong belt will be found of considerable use. For the woman, a snug-fitting costume is advised, with a detachable skirt, that may, if she likes, be taken off after entering the water, in order to give greater freedom to the legs; a necessity if much real swimming is intended. It is important to hamper as little as possible one's movements in the water. It is also an excellent plan for her to wear a belt, by which you may hold her firmly.

Now walk out till the water is breast high, then hold your companion by the left wrist with your right hand, and with your left grasp her belt, she resting her right hand on your shoulder. You are then in the position of partly facing each other, and at the same time can look seaward (Fig. 1). The first big roller comes, and your companion, with a little assistance from you, will rise with it, her head being at all times above the wave; it will, at the same time, pass over you, but with her weight thrown a little forward and upward will form a sufficient brace to enable you to hold your feet without trouble (Fig. 2). This process can be varied somewhat by the changing of your own position, so as to either pull your companion against the breaker (Fig. 3), or push her somewhat ahead and against it—the latter being the easier. Another

method is to grasp her at the belt from behind (Fig. 4), and push her forward and upward in the same way (Fig. 5), but the plan of presenting the side and shoulder to the sea is preferable, as the less resistance offered naturally calls for the less power in overcoming its force.

In case at any time a heavier breaker than usual should strike you and partly break your hold, see that you do not entirely lose your grip, as in this kind of bathing, union is strength, especially for the woman, and without your protection, a question as to the merits of the sport might ensue.

When your companion is ready to rest for a while, take her where she is in touch with the life-lines, and try one or two fancy tricks alone. A very pretty effect is made by turning a somersault forward and into an advancing breaker (Fig. 6). This will leave you in the position of floating with your feet forward to meet the next wave, when you can reverse the action (Fig. 7), and find yourself in your original position. Or, float in a parallel position to the advancing wave, extending the arms above the head and clasping the hands together (Fig. 8); then when it strikes you, slightly raise one shoulder, and you will roll over like a log. These tricks should only be attempted in the deeper water, where there is no chance of touching bottom.

A simpler, and yet equally agreeable



Fig. 5.



Fig. 6.



Fig. 7.

plan, is to turn quickly and present the back to an oncoming breaker, and just as the crest is about to reach you, kick downward sharply with the legs (Fig. 9). This will throw you well up above the surface, and for a few seconds you will experience the sensation of flying.

Perhaps, in conclusion, it might be well to speak of a few attributes of the really expert surf swimmer, chief among which is prudence; and to suggest a plan of action in cases of emergency. Of the greatest importance is coolness and presence of mind, which, with nearly all, comes with experience; few really expert swimmers are drowned if they keep their wits about them.

Another very important matter is one's physical condition when taking a surf bath; it is courting danger to enter the water soon after a meal; two hours should elapse between eating and such violent exercise as surf swimming.

The swimmer should always see that the temperature of his body is not too low; the colder one is, the more is the

liability to muscular cramps, which are sometimes so severe as to be dangerous, especially to the tyro. It is better, in fact, to go in swimming feeling very warm rather than very cold. If seized with muscular cramps, do not shout for help until absolutely necessary, but expend that energy in rubbing the afflicted parts as hard as possible to induce better circulation; in the meantime, work your way by gradual stages to shore and safety; moreover, do not feel that your last hour has necessarily come, and possibly frighten others in the neighborhood into a state of nervous prostration, because, though very painful, cramp can usually be borne; in fact, it is a very common experience with all long-distance swimmers.

In every case where the swimmer goes out to save life, he must approach the drowning person from behind, and grasp him, if possible, by the elbows, or shoulders, or even the hair; but always from behind. If the drowning person makes an effort to grab you, take time and avoid



Fig. 9.

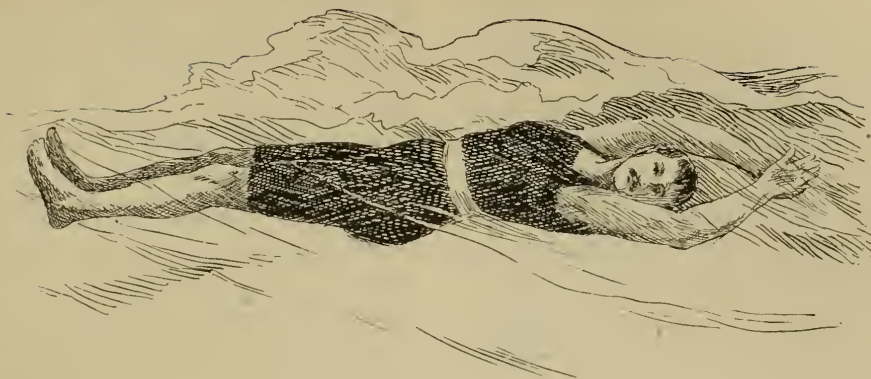


Fig. 8

it; work your way around, grasp the body as suggested, and propel shorewards on your back, with the aid of vigorous leg strokes. This naturally may be said to be easier in theory than practice, but it is not so difficult a matter, if the swimmer will use his head as well as his muscles. If,

however, one has the good fortune to find a life-line in the neighborhood of such trouble, take the extra few seconds needed to tie one end of it around your shoulders—it is useful in many contingencies and may be the means of saving both lives.

THE LEAPING MULLET.

A TRUE "FISH STORY."

By Lynn Roby Meekins.

IN a fish story the surest way to start suspicion is to begin by saying that it is absolutely true. There is really no reason why this should be so, but the fact remains that more reputations have been wrecked upon assertions of piscatorial veracity than even in politics. But with a full appreciation of the perils of the statement, I reiterate, this story is true; the fish did jump into the boat, and the recording angel had no extra trouble on account of the returns which we took to the Virginia home.

At the time it happened I was on a visit at the tip end of the Maryland and Delaware Peninsula, a most interesting country, as flat as a pancake, and as full of colonial history as it is of sweet potatoes; where the original Arlington was located, and where the tombstone is on which John Custis caused an inscription to be put which says, "Aged 71 years, and yet lived but seven years, which was the space of time he kept a bachelor's house on the eastern shore of Virginia."

On the Chesapeake side of the peninsula, which is only a few miles wide here, is the celebrated farm which William L. Scott, the Pennsylvania millionaire owned, and below that is the town of

Cape Charles, which he established when he built the first railroad down the Virginia peninsula, on which is one stretch of forty miles in a bee-line, while the full ninety miles has only two or three curves in it.

North of Cape Charles are beautiful little creeks and bays, all bountifully shaded with pines and oaks. One of them is Cherrystone Inlet, from which the famous oysters come. My friend lived not far away. One morning we got talking about fishing, and he suddenly said:

"How would you like to catch fish without hook, line, net or seine?"

"Shoot'em, you mean?" I said.

"No."

"How then?"

"Let them jump into the boat."

"Oh, that's preposterous!"

He called to a passing negro and asked him if the "fatbacks" were running.

"Reasonabul, suh, reasonabul," was his reply. "Dey hez been better, 'en dey hez been a good deal wus."

My host ordered him to be ready to take us to the shore after supper. I asked all sorts of questions about a fish of which I had never heard before, but the uniform reply was for me to wait until nightfall.

It was dark when we finished supper and there were clouds in the sky—conditions pronounced to be ideal for the sport. Within an hour we were on the soft, smooth beach of one of the creeks. There was the fishing boat, a long canoe or dugout, with good sides and a little more width than usual. At the stern was a platform on which was a large basin half full of earth. Back of the stern seat was a pile of light-wood knots. The negroes had long poles.

"Now," said the Virginian, "all we ask of you is to keep as still as you can."

In a few minutes the canoe was shoved very gently through the water. By this time a bonfire had been started on the soil in the basin, and as the flames got a hold on the rosin of the pine knots, the glare lit up the big trees that lined the shore. The negro in the bow in a very hoarse whisper announced that "they" were jumping. The negro in the stern gave a more vigorous shove of the pole, and before we could say "Jack Robinson" fish were jumping into the boat, over the boat, on our laps and even up our sleeves.

It was a wonderful sight. We were only a few yards from shore, and the fish had evidently been feeding on the shoals covered by the high tide. As they saw our light they scampered for dear life, and hundreds of them leaped into the air in their hurry to reach deep water. On some of the shoals their sudden and marvelously intense movements churned the water white.

Plump! plump! plump! they came into our boat. Some would go all the way over. Some would hit the sides of the boat and fall back into the water. Some would hit us. There were thousands and thousands of them, and we got only an infinitesimal fraction of those we saw. For more than an hour we passed slowly along in the shadow of the trees; and then we went across the creek—it was about sixty yards in width—and tried the other shore, but we found only a few there. The negro said that was because the moon could be seen there, while on the opposite shore its light was shaded by the trees.

When we counted our catch by the light of the bonfire we found that we had one hundred and forty-three. "That is very ordinary," was the comment.

"Then what is a large catch, and what are the things, anyhow?" I asked.

I was told all about it on our drive

homewards. "Fatbacks" is the local name for the small mullet which visits these streams in schools in the late summer and early fall. They are from three to five inches long, and have wonderfully fat backs, hence the name. On the flood tides, after dark, they get into the shallows for food. They have very surprising leaping ability, and when disturbed make for deep water by leaps and bounds. The glare of our light had startled and excited them. The body of the boat being in the dark, they did not see it, and when they jumped into it they thought they were going through space into safe water. The catch generally varies from seventy to three hundred in an evening.

The next morning we had some of our catch for breakfast. They were good, but rather rich and greasy. Still, a great many people fancy them, and they have a good sale at remunerative prices in the neighboring markets, the chief of which is Norfolk.

I knew perfectly well that if this story was told in the North nobody would believe it; so I have just been going through some fish books for fortification by authorities, and to see what the scientists had to say about the leaping mullet. I found this in "The History and Methods of the Fisheries," published by the government under the editorship of the late Professor Goode; "During pleasant weather they swim at or near the surface, when their presence can be readily detected by the ripple caused by their movements through the water, or by constant splashing and jumping. During the fall they move in such immense schools that the noise of their splashing resembles distant thunder, and to the persons living near the bay this noise kept up day and night becomes very annoying."

This, it must be borne in mind, refers to the larger mullet, the full-grown kind, but it shows the nature of the fish.

Now, I merely want to add to this perfectly true fish story, that of the larger mullet as many as six hundred barrels have been caught in one catch, and as many as forty thousand fish have been hauled in one seine at one time; that as a food fish the humble mullet is becoming more and more appreciated, and that something like five millions of pounds of it are sold for food every year along the Atlantic coast.

THE SPORTSMAN'S VIEW-POINT.

By Caspar Whitney.

This is the season in which it is unlawful to kill or have in possession quail, grouse, pheasant, prairie chicken, partridge, plover, snipe, wild fowl, or deer. Restaurants which serve this game are liable to legal prosecution and fine; and people who eat it abet the work of the 'game' butchers and defeat the efforts sportsmen throughout the country are making to provide needful protection for our game birds and animals.

Harvard-Yale Unsatisfactory Boat Race. No Harvard-Yale boat race ever ended so unsatisfactorily as the one of this year. Not because of the actual result of the rowing, but because of the accidents which befell Harvard both before the race and during it. Because of some experimenting in the Yale stroke, which had improved it, the race this year was looked to with especial interest. Last year a break in the Yale stroke nullified its other good qualities. From the very beginning there was no break in the Yale stroke of this season. And it was patent to close observers that, although there was some variation in the methods of procedure, Harvard and Yale were striving to row practically the same stroke. In both boats were veterans of several years' standing; veterans of excellent skill and unusual power. In respect of individual oarsmen the boats were remarkably evenly matched. In each boat, too, the captain was the best oarsman of his crew and one whose value as a leader was, perhaps, even more serviceable to the eight than his blade work. Therefore, the race promised to be a contest of unusual interest.

A week before the day of the race Harvard's captain and stroke-oar, F. L. Higginson, Jr., twisted his ankle, and was obliged to retire from his position. Few accidents that can befall a crew, are, more upsetting than that of losing the stroke-oar, but Harvard's loss was peculiarly disturbing because of the quality Higginson had, more than any other, of holding his crew together, of driving them at the supreme moment, and of getting the most out of them.

Yale Favored by Accident. Whereas, the chances of winning had before seemed to somewhat favor Harvard, this accident threw the balance in Yale's favor. Harding, who had been rowing at No. 2, was put at stroke, and Bullard, who rowed in the 'Varsity last year, but had not made the 1900 boat, was put in at No. 2. In the few days remaining before the day of the race the crew, seemingly inspired to unusual effort by the untoward accident which had befallen them, went better than had been expected and the outlook grew to be more hopeful. Then came the race, with Harvard leading from the start to the one-half mile, and in a desperate and unceasing struggle, Yale leading from the half mile to the two and one-half mile, when Harvard's tremendous spurt gave her the lead at three miles. Then, Harding's collapse at the three and one-quarter mile, with Harvard still in the lead.

A more peculiarly disturbing accident than the collapse of the stroke-oar of a boat when leading three-quarters of a mile from the finish line, is hard to imagine; and it was quite as distressing to Yale as to Harvard, for there is, perhaps, even more dissatisfaction to the crew winning than to the crippled crew losing.

What Might Have Been. What the result of the race would have been with Higginson at stroke; what the result would have been had Harding not collapsed, are, of course, the questions that come to every student of rowing, and will not down unanswered. I do not believe the speed of the Harvard crew was lessened by Higginson's absence from stroke, *i. e.*, its possible speed for

stretches, but I am convinced that Higginson's loss was irreparable, for in those qualities of generalship and driving force, peculiarly needful to the man who sets the stroke and pace for a crew, he was unusually well equipped. Harding's collapse can not be attributed to the physical wear and tear of a bruising pace, for he was one of the strongest men in the boat. Stress of mind, incidental to new responsibilities and desperate racing, no doubt overwhelmed him. Sufficient data is lacking from which to logically reason out what might have happened had no accidents occurred, but the race developed enough to warrant decided convictions among those who follow such matters closely.

The Strokes Compared.

Comparison of the work of the two crews up to Harding's collapse, shows that with a stroke averaging one point lower Harvard about held Yale, while with a stroke equally as high Harvard revealed greater speed. In my judgment the Harvard stroke is more speed-giving than is Yale's, although as I have said, the difference between them is not great, and is most noticeable at its beginning. Harvard's blades take hold of the water quicker, and from the instant the grip is taken the power of back and legs is put on and kept on to the end. It is a lift from the very beginning. Yale's blades seem not to get a grip on the water so quickly, and the shoulders apparently take hold a perceptible instant before the back gets into the stroke.

The Yale blade is not in the water so

long as that of Harvard, and the body swing is shorter by nearly a foot. But the Yale crew rowed beautifully together, and was a powerful combination. It would have made the result uncertain to the last, even with Higginson in his seat, but, in my opinion, Yale must finally have succumbed, for the power in the Harvard boat was equal to that which drove the Yale shell along so evenly.

Rowing Strokes and Critics. The success of Pennsylvania's crews at Poughkeepsie has, I observe, again revived discussion on the question of strokes, and as invariably happens, some extremely fanciful essays on rowing generally, and on the English and American strokes particularly, have resulted. *Apropos* of which nothing more whimsical has come to my notice in a score of years of studious observation of college boating, than the reasons advanced for Cornell's defeat by a correspondent in the *Philadelphia Ledger*, of July 4th. In a word, this critic proclaims Cornell's "downfall," and declares it directly due to Courtney's adoption of the English stroke!

The subject of strokes is one which none should pretend to discuss without intimate and long knowledge of rowing and sound grasp upon the circumstances surrounding the race. The average mind when it touches rowing is as unstable as it is unlearned. It sees results only, and has no consideration for the conditions under which those results were obtained. Moreover, it is exceedingly forgetful in the interest of its own pet theories. Delivery from one's friends would, I sur-



Photo by Pach Bros., N. Y.

Yale 'Varsity Crew.

mise, be a relief, indeed, to college oarsmen, when it comes to a discussion of strokes.

English and American. Comparison of American and English strokes is the stock argument of the average correspondent, who sets out to exploit a theory. Now the stroke rowed by the majority of the American colleges partakes of so many of the principles of the English stroke, that it is not at all simple to disassociate the two, for they by no means represent two distinct classes, but rather are variations of the same type. When, therefore, these correspondents talk of the American stroke, they mean the professional stroke, which was employed by Courtney, Hanlon, Ward and the other famous scullers of twenty-five years ago. But that stroke was and is no more American than Australian or English, because it was practically the stroke used by professionals the world over. It was and is the scullers' stroke, *par excellence*.

This was practically the stroke which Harvard and Yale first learned, and it was precisely this stroke that Courtney first taught Cornell, and which Ward employed in his first two years at Pennsylvania. Harvard and Yale in due season learned that the scullers' sprinting stroke was not the one for four-mile rowing, and the lesson came to each from England, naturally, since every sport we have, save lacrosse and baseball, was cradled on English soil.

Cornell's Experience and Record. Although he had lengthened it somewhat Courtney clung practically to the scullers' stroke until Cornell sent a crew to Henley about five years ago. An abler oarsman or deeper student of rowing than Courtney never coached a crew; and it was to be expected that he should appreciate the failings of the Cornell stroke for distance-rowing, and modify it accordingly.

Cornell had been a repeated and almost invariable winner with the scullers' stroke, because of her masterful coach, and with the improvements, born of the English trip, which in a word comprised more body work and swing, Cornell in '96 and '97 was represented by two of the smoothest and fastest crews that perhaps ever sat in a boat on American waters. The '96 crew beat Harvard by two and three-quarters lengths and Pennsylvania by nearly a minute, and with slower conditions than obtained in 1900, and without the incentive of so close a struggle as that between Pennsylvania and Wisconsin, completed the four miles in 19m. 21s., which is the record for the Poughkeepsie course, and 23 seconds faster than Pennsylvania rowed it this year. The '97 Cornell crew having defeated Harvard and Yale at Poughkeepsie, in 20m. 34s. (Yale being second in 20m. 44s.), a week later, over the same course, beat Columbia and Pennsylvania in 20m. 47 4-5s., Columbia being second in 21m. 20 2-5s., Pennsylvania having gone to pieces and sunk at two and one-half miles.

In '98 Cornell beat Harvard and Yale over the Thames course at New London, and the week following over a three-mile

Kintzing

Allyn



Photo by Gilbert & Bacon, Phila.

Flickwir

Sthele

Snover,

Gardner,

Crowther

Davenport

capt.

Smith, coxswain

Pennsylvania 'Varsity Crew.

course on Saratoga Lake, was beaten by Pennsylvania, both finishing inside the still water record for that distance.

Last year there were discordant elements in the Cornell crew all the season, and a bad break in the boat during the race, and they finished third, to Pennsylvania first and Wisconsin second.

That brings us up to the present year, and unprejudiced readers will, I am sure, find nothing in this record of Cornell to suggest the "downfall" proclaimed by the correspondent to whom I have referred.

**Principles
of the
Four Mile
Rowing Stroke.**

Now, succinctly given, the principles of the English university stroke, are application of the power of the legs, back and shoulders simultaneously, a good reach and swing, the blade pulled through to the end of the stroke, the arms used as connecting rods between the body (power) and the oar, and an easy recover. And these are the principles which substantially obtain in the rowing systems of Harvard, Yale, Wisconsin, Cornell. There are, of course, many variations in detail among these four, and the American university stroke differs from the Oxford - Cambridge stroke, in having less reach and swing and more slide, which, in my judgment, are improvements.

It is not claimed that the principles of the university stroke are the only ones upon which a winning crew can be developed; it is claimed that they are the most advisable for distance rowing, and offer the safest foundation for permanent boating prosperity. It is claimed, too, that a stroke formed on these principles is more speed-giving and less wearing on the men. I have taken up this matter at some length, with no idea whatever of decrying Pennsylvania's stroke, but with the intention of making simple reading for those who would know the true inwardness of this much-discussed question of strokes.

**Pennsylvania's
Stroke.**

Pennsylvania's stroke differs from the other, or, what may be called the American university stroke, essentially in two particulars. (1) In shorter body swing, and (2) in lighter catch. Four years ago the catch was a mere scoop, the blade being, technically speaking, rowed into the water. This, to a large degree, has been corrected, and though the catch is still lighter than that of any of the other crews, the blade does not slice into the water as it did formerly—a correction which alone could easily account for the difference between a swamped and a winning crew. Pennsylvania's theory is that its long slide makes full recompense for the absence of body work. But this is a theory which has been found misleading elsewhere,



Freshman Crew, of Wisconsin University.

and will be set aside in due course, I am sure, at Pennsylvania, where there is much to commend and an obviously progressive coach and board of advisors.

**The Keynote
of
Pennsylvania's
Success.**

The defeat of Cornell in '99 and again this year has no bearing whatever on the relative merits of the strokes employed. Last year the Cornell crew was broken in two; this year when No. 7 caught a crab, they practically quit. Wisconsin, a close second to Pennsylvania in '99 and 1900, steered off its course last year, and had a break in the bow of the boat both years. In both of



William B. Curtis.

the years recited, Pennsylvania has rowed a magnificent race, pulling like one man and revealing indomitable pluck. Nothing could better illustrate the discipline and determination of the crew than its recovery of the lead in the race this year, at the three and one-half mile mark, after it had dropped to second place, through the unseating of its No. 3, who had lost and regained his slide at the three-mile mark. The great strength of the Pennsylvania crew for two years has been its absolute uniformity, which means able coaching, and its stroke-oar, Gardiner, than whom none better, and few so good, have been developed in college boating.

Had the eight men who sat in Pennsylvania's boat this year been drilled in the stroke Cornell revealed, they would, in my judgment, have entirely eclipsed the very good time they made. They had the pluck and the spirit which makes record crews, and had been coached to a point of speed-giving smoothness.

The Death of "Father Bill" Curtis. In the tragic death of William B. Curtis, who perished in a severe storm while climbing Mount Washington, between July 1st and 3d, legislative athletics loses its most commanding figure, OUTING one of its most valued contributors, and America one of its most highly and universally respected sportsmen. "Father Bill," as Mr. Curtis was affectionately called, was one of those whose deeds rather than words, bespoke the quality of his sportsmanship. Few men were so direct in speech, so unaffected in manner, and so ruggedly honest in the small things of life. Equivocation was absolutely foreign to his nature, and

he was intolerant of it in anyone else. He was a fair rival and a plucky, desperate finisher, in his active athletic days, and carried the same disposition through his daily life—even to the hour of his death. He was the sort of whom pioneers and leaders are made—the sort that makes staunch friends and generous enemies.

Mr. Curtis was born in 1837, at Salisbury, Vt. He was a somewhat delicate boy and engaged in sport for the purpose of strengthening his constitution and physique. How well he succeeded his subsequent athletic career bears emphatic witness. His first public match was in 1853, when, with J. C. Babcock, he won nine events in the games of the Chicago Caledonian Club. He entered the Civil War as a private in the Union Army, and was mustered out a captain. In '67 he went to New York, and in company with his life-long friends, H. E. Buermeyer and J. C. Babcock, opened a gymnasium at No. 200 Sixth Avenue, where a year later, September 8th, the New York Athletic Club was organized by these three and some others.

At various periods of his career he excelled in weight-throwing, in sprinting, in rowing, and in weight-lifting. He was the first athlete to use a pair of spiked running shoes and the first to accomplish a hand-lift of 1,230 pounds. On December 20th, 1868, he lifted 3,239 pounds with harness, a feat which has not yet been eclipsed.

Later he became athletic, and then managing-editor, of the *Spirit of the Times*, on whose editorial staff he continued to his death. He was twice president of the New York Athletic Club, and held many offices in various athletic organizations, and could, in fact, have had any office he wished. Although sixty-four years of age at the time of his death few men were more active. He devoted some time every day to exercise, but was especially fond of walking, and perhaps took his greatest pleasure in the rôle of pathfinder for the Fresh Air Club.

His was a notable figure in American athletics; quite the most notable, indeed. **A Remarkable Baseball Series.** The Harvard-Yale baseball series this year was somewhat remarkable for the fact that, although Harvard won two of the three games, yet an analysis of the scores shows Yale to have outbatted,

outfielded, stolen more bases and scored more runs than Harvard. Much of Harvard's success may be attributed to good play; some of it to good luck.

The first game of the series at Cambridge was positively the worst exhibition of baseball, perhaps, two leading college nines ever gave. Yale won by the absurd score of 15—5, but it was apparent that Yale was quite as ready to go to pieces as Harvard, a fact of which there was especial evidence in the first inning, when Yale gave Harvard three runs, by "throwing the ball around." Each side apparently tried to give away the game, and Harvard finally succeeded in doing so. The cause of Harvard's miserable play was undoubtedly due to Stillman's poor pitching.

It is an extraordinary fact, but one oftentimes proven, that the failure of a pitcher to fill the box satisfactorily invariably tends to upset the team. One may argue as one may on the absurdity of a team's losing heart, and corresponding skill, because the pitcher is not doing his part, but the effect is fact, not theory.

**Harvard's
Baseball
Recovery.** Harvard's recovery of normal form, at New Haven, was very creditable, and her defeat of Yale (3—0) was the result of a pitchers' battle between Robertson and Stillman, and one of the best-played games seen this year on the Yale Field. Stillman showed his possibilities by allowing Yale only five hits. For six innings better ball has rarely been seen, and no man from either side got beyond second base.

The final game in New York was equally as good as that at New Haven, and a very gratifying conclusion to a series that began so wretchedly. Sharp and timely batting, and clever pitching by Stillman, overbalanced Yale's cleaner fielding and Harvard won with a score of 5—2. Stillman kept Yale's six hits so scattered that their value was inconsequential, while Robertson, for Yale, and Garvan, who replaced him after the fifth inning, were unable to hold Harvard batters.

**Brown's
Excellent
Work.** Although Harvard's work in these two games was excellent, and quite of the character to be expected after its early season exhibition, yet I see no occasion for altering my judgment of last month as to the relative positions of Princeton and Har-

vard. Despite the fact that the Harvard-Princeton series ended in a tie, with one game each, there can be no two opinions among those who have followed the nines during the season, concerning the superiority of Princeton's all-round work. If, indeed, there is any team having the right to dispute the leadership with Princeton, it is Brown, which against the larger nines has made an equally good, if, indeed, not a better record, having won two and lost one to Yale, won two from Harvard, and won one and lost one to Princeton, making four won and two lost. Princeton won two from Yale, won one and lost one with Harvard, won one and lost one to Brown, making four won and two lost. If Brown's work had not fallen off so materially in her smaller games, she would be, in my opinion, entitled to the leadership among Eastern college baseball teams. As it is, there is no question as to Brown's right to second place, with Harvard third, and Yale fourth.

Yale did the best average hitting in her big games of any of the colleges, Princeton being next; and in addition Princeton did the best base running.

Perhaps the strongest point of Princeton's play, indeed of all of Princeton's athletic work this season, was the spirit which seemed to dominate the athletes from Nassau.

**Team
Polo Play
Triumphant.** The impressive feature of the Prospect Park Tournament for the Polo Championship this year, was the lesson it taught and repeated over and over again throughout the course of the tournament, of the value, indeed, of the absolute necessity to success, of team play. It was first administered when Dedham, composed of Allan Forbes, E. M. Weld, W. H. Goodwin and Joshua Crane, Jr., beat the one-time champion Myopia four—C. G. Rice, R. G. Shaw, 2d, R. H. Holmes, R. L. Agassiz—9 to 6 goals. It was repeated when Dedham a few days later beat Meadow Brook—W. C. Eustis, George Eustis, Harry P. Whitney and Benjamin Nicoll—5 to 2½ goals; but its most impressive demonstration was in the finals for the championship when Dedham met and defeated the Country Club, of Westchester, four—E. Reynal, J. M. Waterbury, Jr., John E. Cowdin and L. Waterbury—of whom the last three are famous in polo history.

Dedham won the championship cup, and won it entirely on the merits of its play. On all three of the big teams it defeated—Myopia, Meadow Brook and Westchester—were individuals among the most brilliant in their respective positions in America, and yet in each case the steady, continuously aggressive play and good team work of Dedham brought victory. There has been no better team work displayed in this country, and seldom has there been better individual play, than that shown by Forbes, Dedham's No. 1.

American Polo's Main Stay. The success of this team and the excellent work of Devon, of Rockaway, and of the Philadelphia Country Club, are among

Philadelphia C.C.—J. P. Lippincott, M. G. Rosengarten, Albert E. Kennedy and J. Frank McFadden—entered the tournament, indeed, as a junior team, and having won that championship by defeating successively Meadow Brook 2d (14½ to 3½ goals), and Rockaway (9 to 3¼ goals), graduated to the senior championship, in which, however, it was speedily defeated by Meadow Brook, 1st (7 to 2½ goals), an exceedingly excellent score to have made against a team of Meadow Brook's class. A second defeat of Meadow Brook, 2d, by the Philadelphia C. C., at Cedarhurst, subsequently, showed conclusively their first victory to have been on merit.



The Dedham Polo Team.

the most gratifying results of the season, for all these are young teams, with men who have learned their game within the last few years; and it is upon such as these that the future of American polo depends. It is to be noted also that Dedham and Devon owe their present positions in the polo season, not to having acquired some star player from another club, but to the development of their own material, which two years ago was scarcely above mediocrity. The same is true of the Philadelphia Country Club team.

Devon—C. R. Snowden, G. W. Kendrick 3d, Charles Wheeler and George McFadden—unluckily for its progress through the tournament, encountered Westchester in its very first match, and was beaten, 12 to 4¾ goals. Though it cannot be said that Westchester showed any particularly loose play against Dedham, yet there is no doubt that its work against Devon was sharper and revealed more of team play. In a subsequent match between these two teams at Hempstead, Westchester again defeated Devon

under the handicap, in which Devon was allowed 6 goals—15¼ to 12 goals.

No small factor in Dedham's success is attributed to their ponies. Take it all in all, unquestionably they were the best mounted of any of the teams in the tournament.

Record of the polo championships:

1895. Myopia—R. L. Agassiz, A. P. Gardner, Robert G. Shaw, 2d, and F. Blackwood Fay.

1896. Rockaway—J. S. Stevens, Foxhall P. Keene, J. E. Cowdin and George P. Eustis.

1897. Meadow Brook—W. C. Eustis, Harry Payne Whitney, Thomas Hitchcock, Jr., and Benjamin Nicoll.

1898. Meadow Brook—W. C. Eustis, Thomas Hitchcock, Jr., C. C. Baldwin and Harry Payne Whitney.

1899. Westchester (Newport) by default—J. M. Waterbury, Jr., Foxhall P. Keene, J. E. Cowdin and Lawrence Waterbury.

American vs. English Polo. Although Mr. Foxhall Keene's team lost its match (2 goals to 8), at Hurlingham, July 7, for the cup which an English four won at Newport in 1886, and carried to England, yet the contest proved how very much the American standard of play has been raised. Mr. Keene's team included W. and L. McCreery and F. Macky, the last a member of the Chicago Club, and the other two formerly of Meadow Brook, and all of only moderate skill.

The match was entirely impromptu. Mr. Keene and his team in no way officially represented America or the Polo Association.

The result of this meeting, however, between American and English players, the first since '86, suggests that a selected American four would have more than an even chance for victory against England's very best. Such a test is likely to come next autumn, if Mr. Keene's invitation, backed by the Association's offer to defray the visitors' expenses, is accepted.

Championship Golf at Garden City. Notwithstanding the Garden City course being a more difficult one than that at Onwentsia (Chicago), where the championship was held last year, the average play of 1900 was quite above that of 1899. Indeed, the tournament provided much the highest class play yet given by Americans. The Garden City course is 6,134 yards in length, with a

stiff bogey of 81, but both Douglas and Travis made rounds better than that score, Douglas doing 77 and Travis 78, while Travis did 36 holes in 163, and Douglas in 165. During the week every one of the eighteen holes was made by one or more players under bogey, while the best ball record for the links was twenty strokes under bogey. Last year the medal score (Onwentsia) was won in 168 by C. B. Macdonald. This year Mr. Travis secured it in 166. It was a week of really remarkable play, and filled with significant suggestion of the qualities possible to American play.

The course had been carefully prepared, and the tournament was perfectly managed by President W. B. Thomas and his efficient committee. If any criticism is warranted, it concerns the putting



H. M. Harriman, and Findlay S. Douglas,
Champion, 1899. Champion, 1898.

greens, several of which were too small, and penalized first-class play too severely; yet it was better to err on this side than on the other.

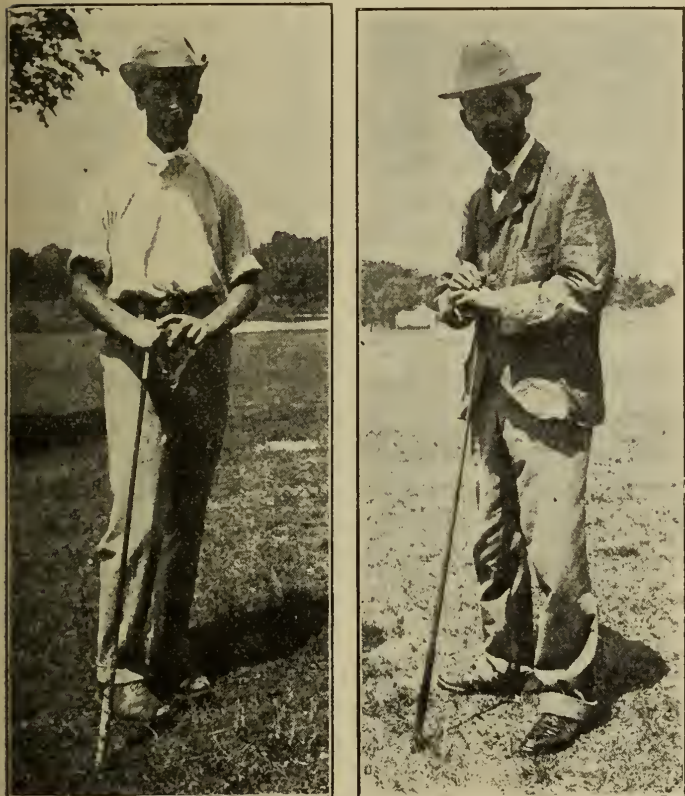
The qualifying score was 187, and among those who were expected to qualify but failed, were Messrs. Herbert Leeds (188), A. DeWitt Cochrane (189),

F. C. Havemeyer (189), C. P. Lineaweaver (191), F. H. Bohlen (191), G. O. Winston (202), and William Waller (198), Mr. H. P. Toler was not entered, and Mr. Jasper Lynch withdrew after the first round. Messrs. Lineaweaver, Wal-

form. He is an Australian by birth, an American citizen by adoption, and thirty-eight years of age. His first appearance in public was in '96, at Van Courtlandt Park, where in a St Andrews Club tournament he finished fourth with 106. Last year he was beaten by Mr. Harriman for the Metropolitan Championship, and by Mr. Douglas in the semi-finals for the National Championship.

He is a deep and highly intelligent student of the game, and considers every phase of play as carefully as though he were at chess. Yet there is no undue deliberation in his work on the links, and literally no nervousness. In truth, he appears in all his matches to be the least concerned of anyone on the course. He is a match player, without a superior, and one who will never lose the title he earned this year through not being on his game. He is always on his game, not only on it, but improving. Last year he could not drive more than 160 to 170 yards; this year his average drives are from 20 to 30 yards longer.

Though his long game was not equal to



A. G. Lockwood.

W. J. Travis Champion. 1900.

ler, Toler, Lynch, all qualified last year, Mr. Toler reaching the second round.

The most distinguished absentee was Mr. C. B. Macdonald, the gold medalist of '99, whose business engagements would not permit of his playing this year.

Travis A Golfing Machine. Next to the high average of general play, the feature of the tournament was, undoubtedly, the consistently good work of Mr. Travis from the beginning to the ending of the week. At various times he made the first, fifth, sixth and seventh holes in three, the second and home holes in two, and the 502-yard hole in four. But it was not so much his brilliancy as his exceptional steadiness, which enabled him to go through the tournament with a record such as no American player has ever achieved.

Mr. Travis, in fact, is a somewhat remarkable golfing figure, a golfing anomaly, indeed, according to traditions of the ancient game, for he not only took up golf when past thirty, but plays it in correct



Photo by T. C. Turner.

Mr. Travis, at End of Swing.

that of Douglas, his approach shots, and especially his accurate and steady putting, more than counterbalanced the driving of the other.



Photo by T. C. Turner.

Mr. Douglas, at End of Swing.

Douglas and Harriman. Mr. Douglas played throughout the week the highest class tournament game he has ever shown, which is tantamount to saying that he, at times, exhibited the most perfect golf an amateur has yet disclosed on American links. His long game was superior to that of any other man on the course, and his approach shots averaged nearly as good as those of Mr. Harriman. The weakest feature of his game was putting, though even in this respect, he did better than usual; in fact, he made some putts of exceptional merit. Generally speaking, his game was steady, which for him was a record of itself, although there were some crucial plays in the Harriman and again in the Travis match, where the familiar failing made its appearance. Perhaps his most masterful exhibitions were in getting out of bunkers on several occasions. The fact that Mr. Douglas so completely overcame his habitual unsteadiness, and that he has less time for play and gets less practice than, perhaps, any man who entered at Garden City, makes his showing this year the more creditable.

Mr. Harriman lost his match with Mr. Douglas because he was quite a bit weaker than usual in his long game, and on several very inopportune occasions, too strong on his approach shots. And this does not, in the smallest degree, lessen the honor

attaching to Mr. Douglas' victory, since it is all part and parcel of the game, and he fairly outplayed the man who had beaten him the previous year for the championship. Yet Mr. Harriman has more natural golfing skill than either Mr. Travis or Mr. Douglas, and one whom we ought one day to see again holding the National Championship. Were he to apply himself so studiously to the theory and practice of the game as Mr. Travis, and prepare as conscientiously for tournaments as Mr. Douglas, there is no telling to what limits he might not reach.

Excellent Showing of the Young Players. Quite the closest and most exciting match of the week was provided by Messrs. Reid and Lockwood, won by the latter at the fortieth hole. The two are so even that the result might quite as likely go the other way on their next meeting. Lockwood is an Englishman, a comparatively recent arrival, who plays in Old World form, and is in the class of our best younger players. He was no match for Travis.

It has been said that the younger players proved a disappointment, because none of them reached the semi-finals. It seems to me a case of great and entirely unreasonable expectations. In my judgment, their record in the tournament was fully up to the highest that could have been reasonably expected. The best of



Photo by T. C. Turner.

Mr. Harriman, at End of Swing.

the younger class, Hitchcock, Stuart and Hollins, were unbeatable until they respectively met the three best players in America—Travis, Douglas and Harriman. What more could be asked of them?

American champions: 1895—C. B. MacDonald; 1896—H. J. Whigham; runner up, J. G. Thorp; 1897—H. J. Whigham; runner up, W. R. Betts; 1898—Findlay Douglas; runner up, W. B. Smith; 1899—Herbert M. Harriman; runner up, Findlay Douglas; 1900—Walter J. Travis; runner up, Findlay Douglas.

Professional Caddies. The employment of professional caddies by a number of the players, was the one unpleasant feature of the tournament. There is no rule prohibiting it, although I hope to see one promulgated at the next U. S. G. A. annual meeting, but a man's sense of sportsmanship ought to keep him from employing one. Judgment and knowing is as much a part of the game as the actual playing. If professionals are tolerated

as match mentors there will result a bidding for the best which will work to the disadvantage of competitors of moderate means, and destroy the sportsmanly element that is now the game's most attractive feature.

Professional advisors in the guise of caddies should be prohibited forthwith.

It will be well, too, if some other month than July be hereafter chosen for the date of the tournament. Early September would be better for many reasons.

Developing Corinthian Sailormen. The widespread tendency to small yacht-building this season is highly pleasing to those hopeful of developing an American class of Corinthian sailormen. There is no better school in the world for building up such a class than the knockabouts and the race-about and the small classes generally up to thirty feet. I am pleased to note also an evident desire among yacht clubs to encourage amateurs at the helm. There is an increase

Summary of Amateur Championship of the U. S. Golf Association, Garden City, N. Y., July 2-7, 1900.

Qualifying Score.	July 2d.	July 3d.	July 4th.	July 5th.	July 6th.	July 7th, Champion
187	T. S. Beckwith, Cleveland.....	Beckwith,				
175	James A. Stillman, Newport.....	3 up, 2 to play	Travis,			
			8 up,			
166	Walter J. Travis, Garden City.....	Travis,	7 to play			
169	Robert C. Watson, Jr., Westbrook.....	2 up, 1 to play		Travis,		
				6 up,		
184	James A. Tyng, Morris County.....	Tyng,		5 to play		
183	H. P. Kneeland, Buffalo.....	8 up, 6 to play	Hitchcock,			
			12 up,			
183	Charles Hitchcock, Jr., Point Judith.....	Hitchcock,	11 to play			
182	Percy R. Pyne, 2d Princeton.....	5 up, 3 to play			Travis,	
					11 up,	
186	John Reid, Jr., St. Andrews.....	Reid,			10 to play	
177	Charles H. Seeley, Wee Burn.....	3 up, 2 to play	Reid,			
			3 up,			
184	T. N. Robertson, Shinnecock.....	Robertson,	2 to play			
182	G. G. Hubbard, Oakley.....	7 up, 6 to play		Lockwood,		
				1 up,		
180	A. G. Lockwood, Alston.....	Lockwood,		40 holes		
177	A. L. Norris, Dyker Meadow.....	4 up, 3 to play	Lockwood,			
			2 up,			
181	J. H. Brooks, Scranton.....	Brooks,	1 to play			
185	Gilman P. Tiffany, Powelton.....	2 up, 1 to play				
						Travis,
184	John Stuart, Princeton.....	Stuart,				2 up.
181	Arden M. Robbins, St. Andrews.....	7 up, 5 to play	Stuart,			
			6 up,			
185	William M. McCawley, Merion.....	McCawley,	4 to play			
186	Stuart Stickney, St. Louis.....	4 up, 3 to play		Douglas,		
				9 up,		
176	Findlay S. Douglas, Fairfield.....	Douglas,		8 to play		
185	Reginald Brooks, Newport.....	5 up, 4 to play	Douglas,			
			10 up,			
176	E. M. Byers, Jr., Alleghany.....	Byers, 1 up	9 to play			
186	A. Kennaday, Montclair.....				Douglas,	
					4 up,	
187	Quincy A. Shaw, Jr., Myopia.....	Shaw,			3 to play	
187	R. A. Rainey, Cleveland.....	8 up, 7 to play	Hollins,			
			1 up			
182	H. B. Hollins, Jr., Westbrook.....	Hollins, 2 up		Harriman,		
187	Tiffany Richardson, Shinnecock.....			5 up,		
				3 to play		
181	J. G. Averell, Rochester.....	Averell,				
178	T. Courtney Jenkins, Baltimore.....	3 up, 1 to play	Harriman,			
			4 up,			
179	Herbert M. Harriman, Meadow Brook.....	Harriman,	2 to play			
183	Louis Livingston, Jr., Westbrook.....	3 up, 2 to play				

of events to which the professional helmsmen are barred, and a conviction, I find, among yachtsmen generally, that there is no way so sure of brewing a true yachting spirit as through the encouragement of amateur sailors.

There is even a similar spirit prevalent among the owners of larger boats. I have been pleased to note the frequent handling of their own 70-footers by Messrs. W. K. Vanderbilt, Jr., Herman B. Duryea and Harry Payne Whitney, and the very clever work of Mr. August Belmont's two sons, Raymond and August, Jr. Perhaps no better class for sharpening the wits of amateur helmsmen than the 30-footers was ever floated. They have furnished the highest class of sport for several seasons at Newport, and are doing the same again this year. It is pleasing to note that the boats sailed by amateurs are the most frequent winners, and yet more gratifying to record that in the opening of the Newport series, *Yankee* and *Virginia*, the Duryea-Whitney and Vanderbilt 70-footers, finished first and second, sailed by their owners and manned by American crews; beating *Mineola* and *Rainbow*, sailed by British professional skippers, and manned by British crews.

**Irresponsible
Hunters,
and
Long Range Rifles.**

Recently I cautioned men who go into the woods with modern long-range rifles a-slaying of the deer. It is fitting to warn riflemen, though few take heed. There are some men who are safe with every kind of gun, and others who are unsafe with any that will carry more than two hundred yards. A month or two hence the newspapers will contain the usual number of paragraphs about persons killed in mistake by deadly amateur wanderers through the eastern and western forests.

There is no necessity for this sort of thing, of course. A man unable to distinguish between the movement of another man and that of a deer, has no business off the asphalt. As such people will get into the woods, however, and will lug with them arms capable of execution at a thousand yards or more, it is suggested to genuine hunters that they wear some small article to catch the errant eye of the urban shooter. Deer-hunting Indians are accustomed to wear a red handkerchief

bound about the forehead; and they are wise people. It is probable, of course, that the glint of red silk through brown or green leaves would merely serve to persuade the urban Leatherstocking that a flamingo or bird of paradise was within range, but the heirs and assigns of the deceased would have the satisfaction of knowing that their lamented had done everything possible to avoid becoming a "demned moist unpleasant body."

The idiocy of it all is more apparent when one reflects that a rifle with a Krag zone of fire is of no especial value in the woods, anyhow. It is good for antelope or sheep or goat, or any form of plains or open mountain shooting, but in the great arboreal districts the ordinary rifle reaches as far as needed—and has more shock to it.

**Fugitive
Wild Fowl.** In Southern Texas and along the coast part of Louisiana sportsmen during the past season observed a noticeable decrease in the number of wild fowl of every kind. Time was in those sections when a man could shoot ducks or snipe all day long. It was a good thing pushed so far along that it went out of sight altogether. The causes of it are patent. Birds that are shot at from daylight until dark and after dark, come to dislike a region of constant murder. Those of them that are able, get away and stay away. Parents which have gone luckily through two seasons of bombardment are apt to lead their second brood to a place which promises more quiet and safety. That is one reason. Another is to be found in spring shooting. In Louisiana and Texas the birds are killed up to the very moment of departure. It is unfortunately to be recorded that they are killed far on their way north. They pass, indeed, through and over a belt of fire that is a thousand miles wide. The effect of this sort of gunning has but one end.

They dodge shot, and probably collect a few, all through Louisiana, Arkansas and Missouri. Swinging up the Mississippi, they reach the mouth of the Illinois and start along that notable stream. A gunner is behind every bend, in every clump of rushes, in every weed-swathed floating bunch, which looks like drift, but is nothing of the kind.

This mallard, or jack snipe, is not out of smell of powder or hearing of explo-

sions until it gets to Wisconsin, and by that time it is a pretty tired flyer. It will get on up into Manitoba, or farther, and raise a brood—if the egg hunters let it alone. If killed *en route*, in nine cases out of ten it will be bearing eggs with it. The only devisable remedy for this sort of thing is inimical public sentiment, because upon this sentiment depends the creation and enforcement of proper laws; and the only way in which the sentiment can be made is to keep hammering with strong and willing hand upon the same nailhead.

A Better Lawn Tennis Outlook.

There has been much in lawn tennis play this season to give hope that the semi-finals of the National Championship tournament, at Newport, in August, are not again to be monopolized by second-raters. In the return of E. L. Hall and W. A. Larned to the game, we are certain of at least two first-class men, who will be found disputing the way to the All-Comers. It is true, none the less, however, that the American first class continues woefully depleted, and there seem only occasional indications of play among new men suggestive of worthy recruits. Up till now the West, barring R. D. Wrenn and his brother, G. L., has furnished but one other member of the first class, Carr Neel. But if the play of the Californians against Whitman and Davis last year, and the showing in the recent Middle Western championship, won by Kreigh Collins over Sumner Hardy, the Californian crack, are to be taken as any indication, it looks as though a candidate next year, if not this, might be forthcoming from out of the West.

It is rather remarkable that more high-class men are not developed in this game, the reason undoubtedly being that American players practically retire from active tournament competition after they have been graduated from college. This is especially true now with the less exacting golf to supply the desire for exercise.

Return of Veterans.

Tournaments thus far this season have been interesting with the return of E. L. Hall and W. A. Larned, after an absence of several years. Hall's first appearance was in the New Jersey State Championships, and his greatest achievement at that time the defeat of Richard Stevens, 6—4, 6—3, 6—8, 6—2, having previously beaten J. P. Paret in the final

round, 3—6, 5—7, 6—4, 6—2, 6—2. In the Middle States Tournament, Hall quite excelled himself in the first round by beating W. A. Larned 2—6, 7—5, 6—4, his superior steadiness more than counterbalancing Larned's brilliancy. Subsequently, however, Hall was defeated by Holcomb Ward, whose twist service and rapid vollying he seemed unable to overcome. Surprises seemed to be the order of the day of this tournament, in fact, for subsequently Ward was beaten by Clothier, the Pennsylvania champion, and Dwight Davis beat Beals Wright, which was not of itself astonishing, but provided a record-making set of 18—16. The returned veterans all seem, naturally enough, to be weak in overhead strokes.

The championship round of this tournament brought Malcolm Whitman and Dwight Davis together. Davis earlier in the season had defeated Whitman in the Massachusetts championship, but on this occasion showed nothing like the speed of his early matches, and Whitman won, 3—6, 6—3, 6—4, 6—3, in a match that was not particularly brilliant from either side.

The most significant meeting of the first class men, however, was for the Canadian championship, July 14th, in which W. A. Larned, having beaten Beals Wright in the finals (6—2, 7—9, 4—6, 6—4, 11—9), met the holder, M. D. Whitman, and was defeated (7—5, 3—6, 6—3, 1—6, 7—5). The match was very close, but the champion's lobbing and twist service brought him the victory.

Championship Prospects.

Thus far, then, this season, the tournaments have revealed no new player who is likely to figure in the championships at Newport. W. A. Larned has not yet attained the form which made him a factor a few years ago, and Hall, although he is apt to make a strong bid, seems thus far not able to adapt himself to the fast vollying and erratic service which he is sure to meet in players of the latest school. Paret, the winner of the All-Comers last year, has been playing continuously, and is in about as good form as he was in 1899, which means that he is a steady, all-round hard player; he has been beaten by Beals Wright and by Hall, and ought to be by these and by Davis or Whitman or Larned any time he encounters them, despite his victory over Davis last year.

It is entirely probable that the real struggle for the All-Comers will be among Larned, Davis, Wright and Hall, and Davis seems to be the most likely winner. Indeed, unless Whitman much improves the game he plays most frequently, Davis must be considered as having an excellent chance of winning even the championship.

**American
Athletes win
English
Championships.**

The work of the American athletes at the English Championships, was an excellent beginning of what is sure to prove a triumphant tour, yet it served also to again emphasize how inferior are we in distance running, compared with the English. In the sprints and in events where skill and agility are the needful qualities, the Americans were, as they always have been, preëminent, but in the distance runs we were outclassed, as usual. The 100-yard run resolved itself into a struggle among the Americans: A. F. Duffey, Georgetown; Frank W. Jarvis, Princeton; W. B. Tewksbury, Pennsylvania, and C. L. Burroughs, Chicago; finishing in the order named, in 10 seconds. The English representatives were completely shut out in the trial heats. M. W. Long, Columbia, won the quarter-mile in 49 4-5 seconds, with W. A. Maloney, Chicago, second. J. F. Cregan, Princeton, was beaten out for first in the half-mile run by an Englishman, A. E. Tysoe, in 1m. 57 4-5s. Cregan is not in condition.

Alexander Grant, Pennsylvania, got no better than third place in the mile, won in 4m. 28 1-5s. No American was placed in the four-mile run. A. C. Kraenzlein, Pennsylvania, won the 120-yard hurdles, establishing a new turf record of 15 2-5 seconds. I. K. Baxter, Pennsylvania, won the high jump, 6ft. 2in., W. C. Carroll, Princeton, tying for second with two others. A. C. Kraenzlein, won the broad jump, 22ft. 10 1/4 in. Bascom Johnson, Yale, won the pole vault, 11 ft. 4 in., M. B. Colket, Pennsylvania, being second, 11 ft. 1 in. Richard Sheldon, N. Y. A. C., furnished the surprise of the day by defeating D. Horgan, in the shot-put, with 45 ft. 10 1/2 in. Horgan has won the English shot championship for a half a dozen consecutive years, and is the holder of the world's amateur record, of 47 ft. 1 in., made August 12, 1899. The next best figures on record are 47 ft., the American record, made by George R. Gray, in '93.

John Flanagan, under the colors of the N. Y. A. C., defeated a compatriot, T. F. Kiely, in the 16-lb hammer event, with a throw of 163 ft. Kiely is a famous Irish athlete, who held the all-round championship of Ireland for three years, and won the English hammer championship in 1897, '98 and '99.

**Mug Hunters
and Disregarded
Agreements
at Paris Games.**

In point of popular interest and genuine international competition the Paris Exposition athletic games were utterly insignificant as compared with the Olympic games, given at Athens, in '96, with its Stadium and seventy thousand spectators. In point of fact, the Paris games were no more, no less, than an American inter-collegiate meet, with Harvard out. With the exception of the English half-miler, A. E. Tysoe, who beat Cregan, in the English championships, Pritchard, the English hurdler, and Stanley Rowley, the New South Wales champion sprinter, there were positively no really good men entered except from America. England, Ireland, Scotland or Germany sent no champions, and but for the Americans the games would have been the complete fiasco, in athletics and in spectators, they really deserved to be, considering their sponsors and the character of management. There were about one thousand spectators, mostly Americans, and Americans provided a high-class athletic entertainment for Paris, and swept the field in the preliminaries, excepting for the discus.

These were the only finals decided Saturday, July 14; but the preliminaries showed that, barring the half-mile, because of Cregan not being in form, practically all the events were at the American's mercy.

The French officials had promised no races would be run on Sunday, July 15; American athletes had entered because of that promise; but both promise and agreement were disregarded. The majority of the American athletes, including the Princeton, Chicago, Michigan and Syracuse teams and two-thirds of Pennsylvania, to their credit be it said, declined to compete on Sunday. But the situation revealed the mug-hunters, and these who did not stand with their countrymen and who did compete, I record as follows: Kraenzlein, Baxter, Colket, Tewksbury and Orton, Penn; Holland and Minahan, Georgetown; Long, Columbia; Sheldon,

N. Y. A. C.; Hall, Brown; Bray, Williams. The individual sportsmen who qualified on Saturday, but declined to compete on Sunday, regarding principle worthier to be cherished above mere prize-winning, were: Prinstein, Syracuse; McCracken, Remington, Grant and Bushnell, Penn.; Garrett and Carroll, Princeton; F. G. Moloney, Chicago; Boardman and Johnson, Yale; Dvorak and Lee, Michigan.

Mr. Charles Sherrill, in the names of the Americans, protested through Mr. Spalding to the French officials. But it will not avail. The situation proved to be just what was to be expected, and properly serves the American colleges who were so keen to get the advertisement of sending athletes to Paris, that even the possible loss of their amateur status, did not deter them. The management of the Frenchmen and of Mr. Ferdinand Peck, American Commissioner, has been quite as miserable as was expected.

All-Round Individual Athletic Championship. The most impressive feature of the all-round individual athletic championship, which was won July 5th, at the Knickerbocker A. C. Field, Bergen Point, by Harry Gill, of the Toronto Y. M. C. A., was the poor showing of E. H. Clark, of Boston, who won the championship in 1897, with 6,244½ points. This does not mean that Clark would have won again this year had he been in condition, for Gill is a superb figure of an athlete, and aside from his success with a record number of points, 6,360½, gave evidence of being able to do even better in a number of events in which he competed. There is little doubt, however, that had Clark been in anything like his '97 form, the struggle for first place would have been very keen. As it was, it was very tame, for, early in the contest, Clark was distanced, and the only other two competitors were Daniel Reuss, a fairly good all-round man, and E. C. White, who won the championship in 1898, because there were no really good men entered.

Gill is a fine type of athlete, and a meeting which would bring him, A. C. Kraenzlein and J. F. Powers (champion of 1899) together, would be a contest worth going far to see. Gill is 6ft. 1in. tall, weighs 168 pounds, and is 23 years of age. His notable performances in the all-round were the running high

jump, 5ft. 11⅞in.; 16lb. shot-put, 41ft. 5½in.; 56lb. weight-throw of 27ft. 7½in. In sprinting, hammer-throwing, pole-vault and hurdling his performances were fairly good only.

Other all-round American champions: 1884; W. R. Thompson, Montreal; 1885, M. W. Ford, N.Y.A.C.; 1886, M. W. Ford, 45 points; 1887, A. A. Jordan, N.Y.A.C., 36; 1888, M. W. Ford, S.I.A.C., 28; 1889, M. W. Ford, 36; 1890, A. A. Jordan, 41; 1891, A. A. Jordan, 30; 1892, M. O'Sullivan, X.A.C., 45; 1893,* E. W. Goff, N.J.A.C., 4,860; 1894, E. W. Goff, N.J.A.C., 5,748; 1895, J. Cosgrove, N.J.A.C., 4,406½; 1896, L. P. Sheldon, N.Y.A.C., 5,380; 1897, E. H. Clark, B.A.A., 6,244½; 1898, E. C. White, N.Y.A.C., 5,243; 1899, J. F. Powers, Notre Dame, 6,203. *New system scoring.

America Defeats France in the Revolver Match.

Among the various international competitions in which representatives of America are this year engaging, the result of none has been more surprising and, therefore, so gratifying as the revolver match between American and French teams. The American is proverbially a superior rifle shot, and when he has given attention to the revolver has shown equal skill. But revolver shooting is, regrettably enough, not a particularly popular sport in America, although it is growing very rapidly every year, thanks to the efforts making by the various State militia organizations.

The challenge from the Frenchmen led to the organization of the American Revolver Association, with Dr. R. H. Sayre, president, and to a series of shoots preliminary to the choice of a team.

The American team included J. Dietz, Jr., W. E. Petty, Dr. R. H. Sayre, B. F. Wilder, J. Waterhouse, L. R. Piercy, Dr. W. G. Hudson, J. B. Crabtree, W. A. Smith and A. L. A. Himmelwright. According to the terms of the match the teams shot alternately at the American target, fifty yards, with its 2⅞-inch bull's eye, and the French target, fifty-two and one-half feet, with its 1⅞-inch bull's-eye, thirty shots to be fired at each target.

Revolver shooting is very much in vogue among Frenchmen, who have the best galleries in the world, and it was presumed that though there was hope of our winning at the American distance, little probability existed of our success at the French target. But the American team made a total score of 4,889, against the French 4,828, doing 23 points better on the French, and 38 points better on the American target than the Frenchmen.

UNIVERSITY BOAT RACES.

THE aquatic year of 1900 will long be remembered as providing the closest finishes and the most stirring contests in the annals of American college boating. This is more notable as applied to the racing on the Thames than on the Hudson, for the rule on the Thames has been usually a struggle during the first mile of the race, and a procession thereafter. On the Hudson the struggle for the first place has generally been more prolonged and the finish closer.

HARVARD-YALE 'VARSITY.

THE Harvard-Yale race at New London this year was looked upon as fraught with peculiar and unusual interest, owing to the improvements which Yale had been making in her stroke. It was, therefore, most unfortunate that Harvard should have lost her stroke-oar and her captain, F. L. Higginson, Jr., within a week of the race day. This accident to the crew necessitated placing Harding, who had been rowing at No. 2, at stroke, and putting Bullard, one of the substitutes, in Harding's seat at No. 2, while Sheafe, No. 7, was elected captain. Thus the boats lined up on June 28th, with a slight favoring breeze and smooth water.

The start was made at 1:50 p. m. Both boats caught the water and were off well together in their racing start strokes; Harvard, however, began shoving so rapidly to the front that, in the first thirty seconds, it seemed as though the Crimson, rowing a 36 stroke to Yale's 35, would secure a commanding lead, as had been the case in the previous year. But such thought was soon dispelled by the resolute and powerful manner in which Yale set to work, and within an eighth of a mile Harvard had ceased gaining, while the stroke in each boat dropped

a point. At the quarter mile the strokes had dropped a point more, and at the one-half mile, which Harvard completed in 2m. 32s., to Yale's 2m. 33 2-5s., Harvard was rowing 32 to Yale's 33. Gradually now, Yale, holding the same stroke but putting a tremendous heave into it, began overhauling Harvard, though the latter clung to a 32-stroke; in fact, throughout the race Yale rowed for the most part a stroke one point higher than Harvard, pulling 33 finished strokes to Harvard's 32.

AT the mile Yale had caught Harvard, and the two passed the flag bow and bow in 5m. 10s., which was not especially fast time under the conditions. Harding was setting a fine stroke and it looked as though the Crimson was not after all to very much feel the loss of Higginson. Working towards the mile and one-half mark, Yale appeared to be making greater effort than Harvard, to be getting more back on to their oars, and their shell began gradually to push to the front. The work of the men in both boats made as fine an exhibition of rowing and watermanship as one could wish to see; there was not a splash—not a break anywhere. As the boats moved bow to bow the difference in the two strokes was patent. Harvard's body-swing was longer, the blades caught the water quicker, and the backs were put onto the work at once, and sustained powerfully in the swing past the perpendicular. Yale appeared to get on a tremendous heave with the shoulders at the beginning of the stroke, but the blades seemed not to get hold of the water so quickly as those of Harvard's, while their greatest power looked to be when the oar was about at right angles with the boat. In a word, Yale's blades were not in the water so long as those of Harvard. But



Photo by Pach Bros.

Higginson at Stroke, Harding at No. 2.

Harvard 'Varsity Crew.

Yale was beautifully together; perhaps better together than Harvard.

At the mile and one-half Yale's increased power had improved her position so much that she passed the flag in 7m. 54s., Harvard being nearly a length behind in 7m. 57s. Realizing that the Yale boat was steadily leaving them, Harvard, without increasing the number of strokes at this point, put enough more power in their work to check Yale's gaining. It was the beginning of a series of spurts that have never been excelled in college boating. At the second mile flag, Yale still had the better of it, passing in 10m. 31s., with Harvard barely a length away in 10m. 33s. Between the two mile and two and one-half flags, Yale responded to Harvard's spurt and drew away as much as Harvard had pulled up on her in the previous half mile. There was a little over a length between them at the two and one-half mile mark, which Yale passed in 12m. 28s., with Harvard in 12m. 31s.

At this point began the greatest struggle of the day. Harding appreciated that if he were to catch Yale at all it must be within the next mile, and called for another spurt. The Harvard boat began to creep up inch by inch, until Yale had only a bare quarter of a length advantage, with Harvard still gaining. It was a crucial test and a severe one, and stroke Harding was showing excellent judgment and exceptional fighting quality. A bare eighth of a mile from the three-mile mark, the Harvard shell was on even terms with Yale and was being lifted through the water by great strength and splendid oarsmanship. Yet but for a momentary bit of unevenness, that passed almost with its coming, there was no faltering in the Yale boat.

Slowly Harvard now began to move away from Yale. With every stroke the prow could be seen pushing its way to the front. First only a few feet, then a quarter of a length. Meantime both crews were rowing in splendid form—none lost his head, and none splashed. Still the Harvard boat crept farther away, until it was half a length, then three-quarters, and Harvard passed the three-mile flag in 15m.



Photo by Pach Bros.

Columbia 'Varsity Rowing Squad.

30s., with Yale nearly a length behind in 15m. 32s. With Harvard still gaining a little at every stroke, the crews moved on to the three and one-quarter mile, when suddenly it was apparent something was wrong with Harvard's stroke-oar, Harding. His blade swung in the air, and then dabbled feebly at the water, while the shell swerved from its course. Then Harding seemed to pull himself together in an endeavor to get back into the stroke, which the other seven meantime were maintaining without hitch. But the effort was unavailing; within a half dozen strokes he caught a crab, and sunk in his seat, unconscious. The other seven in the boat, recognizing their desperate situation, spurted gamely and powerfully to no purpose, for Yale began to draw up and at the three and one-half mile was leading by over a length in 18m. 29s., Harvard passing that point in 18m. 33s. Though Harvard continued pluckily, the race had, of course, been concluded with Harding's collapse. Yale continued to pull in even, beautiful style without extending themselves, and crossed the finish line in 21m. 12 4-5s., nine lengths ahead of Harvard, which finished in 21m. 37 2-5s.

It had been a desperate race, and up to the collapse of Harding no man in either boat had interrupted the rhythm of perfected rowing. Up to the three and one-quarter mile a better race was never rowed, and though stamina is a part of every competition, and Harding's collapse must be viewed as of the misfortunes



Wisconsin Varsity Crew.

of war, yet Harvard's crippled condition is regretted by Yale as well as by Harvard. Sheafe's work in holding Harvard together and playing the game out to the end, was a praiseworthy exhibition of sportsmanship and pluck. W. A. Meikleham, Columbia, was referee.

HARVARD-YALE FOUR-OARED.

HARVARD won the four-oared race (with coxswains) rather easily. Her crew—N. W. Tilton, G. M. McConnell, G. Bancroft, E. P. Henderson—took the lead at the start and had secured a good half length before 100 yards had been rowed. Harvard's form was very much better than Yale's in every respect, and won by three lengths handily in 13m. 22s., to Yale's 13m. 35 2-5s.

HARVARD-YALE FRESHMAN.

THE Freshman race was a decided upset, as it was generally supposed, without very much question, that Yale would win. The Harvard crew was very strong, but very rough in its work, while the Yale crew had been particularly smooth most of the season, in addition to being an especially powerful eight. In fact, both of these crews were unusually heavy, averaging 170 pounds. Harvard took the lead at the start, and at the half-mile had nearly a length the better of it. At the mile they had increased this to four lengths, and finally finished in 12m. 01s., as against Yale's 12m. 19 2-5s.

Yale's form and watermanship was much better throughout the race, Harvard being crude in its work, but there was a life and strength in the Crimson eight that more than

made up for its raggedness. The winning boat held: E. B. Roberts, stroke; J. B. Ayer, No. 7; W. S. Whitwell, No. 6; W. James Jun, No. 5; D. D. L. McGrew, No. 4; L. H. Switzer, No. 3; F. Foster, No. 2; C. H. Hartwell, bow; B. L. Stitchfield, coxswain.

THE HUDSON RIVER COLLEGE REGATTA.

THE racing on the Hudson this year was even more exciting than has been the case for the last two seasons. Such a ding-dong finish as that between Pennsylvania and Wisconsin has never been witness-

ed over a four-mile course in America—it is doubted if it was ever duplicated anywhere. Pennsylvania's triumph at Poughkeepsie this year was decisive. Her three crews rowed with absolute perfection the stroke they had been taught, two of them won their races, and all rowed in good form and with notable pluck to the very end. Not only was their exhibition of their stroke a perfect one, but they were physically fitted to the hour.

The Varsity race on June 30th, included Pennsylvania, Wisconsin, Cornell, Columbia and Georgetown; it was scheduled for 4:30, but postponed until 6, and not actually started until about 7 o'clock. The first postponement was unnecessary, since the water was quite smooth enough for rowing, and the delay, inexcusable and harassing to both oarsmen and spectators. The management of the regatta was not good; steamboats were permitted on the course, with the result that Pennsylvania narrowly escaped a broken shell before the race started, and again at the three-mile flag, the swells were responsible for crabs, in both the Pennsylvania and the Columbia shells.

WITH the exception of Columbia all the crews caught the water in excellent time, and got off together, Pennsylvania having a little the best of it, followed very closely by Cornell and Wisconsin, with Georgetown fourth and Columbia quite a bit astern. In a very short distance, however, both Cornell and Wisconsin had caught and passed Pennsylvania, and at the half-mile, Cornell, rowing in beautiful form, had a lead of a good half length, while Wisconsin led Pennsylvania, and Georgetown

was doing surprisingly well within half a length of Pennsylvania; Columbia was in fifth place, at least two lengths back of Georgetown. The strokes at this point being, Cornell 34, Pennsylvania 36, Wisconsin 34, Columbia 35, and Georgetown 36. At the mile Wisconsin and Cornell were in the lead, practically bow and bow, with Pennsylvania having caught up sufficiently to be not more than a quarter length away, while Georgetown, although a length astern, was hanging on rather surprisingly, though rowing in ragged form.

It became evident at the mile and one-half that the race was to be among Cornell, Wisconsin and Pennsylvania; Georgetown was dropping back, and Columbia was too far astern to be considered a factor. Wisconsin had put on something of a spurt and secured a quarter of a length lead at the mile and one-half flag, Cornell dropping back to Pennsylvania, who was pulling a very strong stroke of 34.

NEARING the two-mile mark Pennsylvania spurted and took the lead, with Wisconsin and Cornell on about even terms; Georgetown at this point was some three lengths astern, rapidly going back toward Columbia, who, with the prospect of not finishing last, began to row in better form. Georgetown rowed desperately, but with no avail, and was gradually overtaken by Columbia. Meantime the leading three crews were racing, with Pennsylvania leading Cornell by a scant quarter, and Wisconsin hardly one-third of a boat length astern of Cornell. Cornell's form was quite the best of the three, the most perfect time and the cleanest blade work; it looked as though they must eventually win, particularly as they were rowing from one to two points lower than the others, who ranged persistently from 34 to 36. The work of Pennsylvania was also clean and powerful. Wisconsin's rowing was powerful, but not clean, there being quite a bit of splashing and a decided break between bow and No. 2.

Nearing the three-mile flag it became evident that Cornell could not stand the pace, and would not last; her men seemed weakening. Passing under the bridge, or just as the three-mile flag was reached, Wisconsin spurted and, passing Cornell, bore down on Pennsylvania. Immediately thereafter No. 7 in Cornell's boat caught a crab and for a few seconds it seemed as though the crew was going to pieces. As a matter of fact the crew did obviously lose heart and from that point was out of the race. It pulled like a beaten crew and, as a matter of fact, was nearly overhauled by Columbia, which rowed the last mile of the race better than the first.

FROM the three-mile mark, where Pennsylvania had a lead of about a length over Wisconsin, the race between these two was superb to the very finish, and remarkable for the loss and recovery of his seat by No. 3 in the Pennsylvania boat. For a moment it seemed as if Pennsylvania was done for. As it was, they dropped into second place and were nearly abreast of Cornell when, with remarkable skill and nerve, No. 3 recovered his seat and without a break the crew fell immediately to work. Before the three and one-half mile mark had been reached Pennsylvania was again in the lead. It was one of the most extraordinary exhibitions of cool skill that a boat race has ever afforded.

The power in the Pennsylvania boat was tremendous; the men seemed able to spurt without end. Wisconsin strove desperately to overtake them, but was forced to finish in second place, three-fourths of a length astern, Cornell being three lengths astern of Wisconsin and Columbia lapping Cornell. Time of the winner, 19m. 44 3-5s.; Wisconsin, 19m. 46 2-5s.; Cornell, 20m. 4 1-5s.; Columbia, 20m. 8 1-5s.; Georgetown, 20m. 19 1-5s. The record time for this course is 19m. 21s. Richard Armstrong, Yale, was the referee.



Photo by McGillivray.

Cornell 'Varsity Crew.

FRESHMAN.

THE Freshman race in which Wisconsin, Cornell, Pennsylvania and Columbia started, provided another remarkable exhibition of Pennsylvania's pluck. Wisconsin took the lead and after the first half-mile it was very apparent that, barring accident, the Western crew would win out. Cornell and Pennsylvania had a struggle for second place all the way down the course until at the mile and one-half Cornell seemed to have secured a commanding lead, but in the last half-mile Pennsylvania, by sheer pluck and strength, and good time in the boat, crept up and finally pulled into second place, within a few yards of the finish.

This race was rowed so late the crews could scarcely be seen from the river bank. Wisconsin won by two and one-half lengths; Pennsylvania defeated Cornell for second by one-fifth of a length, and Columbia fourth by several lengths. The time for the winner, 9m. 45 2-5s. Members of the winning crew: A. J. Quigley, stroke; J. A. Armstrong, No. 7; L. H. Levissee, No. 6; C. H. Gaffin, No. 5; R. E. Stevenson, No. 4; D. Trevarthen, No. 3; W. K. Murphy, No. 2; H. W. Werner, bow; T. F. Sawyer, coxswain.

THE four-oared race was postponed until the following Monday (July 2d), and was won by Pennsylvania in 10m. 31 1-5s., very easily over Columbia, which finished in 10m. 38s. Cornell, the other participant, went to pieces at the one and one-quarter mile mark and did not finish.

It cannot be said that either the Cornell 'Varsity or the four-oared crews derived glory from their racing this year; had the strength and grit of the 'Varsity been in proportion to its beautiful form for two and one-half miles they must have finished nearer the front, if not first.

Members of the Pennsylvania (coxswainless) four-oared crew: S. J. Henderson, J. G. Snider, S. W. Sinkler, J. F. Atkin.

RECORD OF HARVARD-YALE BOATING.

The first eight-oared Harvard-Yale boat race was held at Springfield in 1876, although the two universities had met in fours or sixes with other colleges so far back as 1852. Yale won in '76 in 22m. 02s., defeating Harvard by 31 seconds. In 1877 a race was rowed over the same course, Harvard taking the victory in 24m. 36s, 8 seconds ahead of Yale.

From 1878 the two met on the Thames annually until 1896, when, as a result of interrupted athletic relations Yale went to England and was beaten by Leander in the Henley Regatta; Harvard entered a four-mile regatta on the Hudson, against Cornell, Pennsylvania and Columbia, and finished second to Cornell by two and one-half lengths in 19m. 21s.

In 1897 Harvard and Yale were both beaten

on the Hudson by Cornell, in 20m. 34s., Yale being second by three boat lengths. Cornell, a week later in the same year, defeated Pennsylvania and Columbia. In '98 Cornell raced Harvard and Yale on the Thames, at New London, and won in 23m. 48s., Yale being second in 24m. 02s.

No comparison is possible of times made on the Hudson and Thames rivers; the conditions are invariably very much faster on the Hudson.

The record for the Thames course, 20m. 10s., is held by Yale, made in 1888 by Captain Stevenson's crew. Harvard's best time, 20m. 44 3/4s., was made in 1878.

Summary of Harvard-Yale New London races:

Year.	Winner.	Time.	Loser.	Time.
		M. S.		M. S.
1878—	Harvard.....	20:44 3/4	Yale	21:29
1879—	Harvard.....	22:15	Yale	23:58
1880—	Yale.....	24:27	Harvard	25:09
1881—	Yale.....	22:13	Harvard	22:19
1882—	Harvard.....	20:47	Yale	20:50 1/2
1883—	Harvard.....	24:26	Yale	25:59
1884—	Yale.....	20:31	Harvard	20:46
1885—	Harvard.....	25:15 1/2	Yale	26:30
1886—	Yale.....	20:41 1/4	Harvard	21:05 3/4
1887—	Yale.....	22:56	Harvard	23:10 1/2
1888—	Yale.....	20:10	Harvard	21:24
1889—	Yale.....	21:30	Harvard	21:55
1890—	Yale.....	21:29	Harvard	21:40
1891—	Harvard.....	21:23	Yale	21:57
1892—	Yale.....	20:48	Harvard	21:42 1/2
1893—	Yale.....	25:01 1/2	Harvard	25:15
1894—	Yale.....	22:47	Harvard	24:40
1895—	Yale.....	21:30	Harvard	22:05
1896—	No race.			
1897—	Triangular race, on Hudson.			
1898—	Triangular race, on Thames.			
1899—	Harvard.....	20:52 1/2	Yale	21:13
1900—	Yale.....	21:12 4/5	Harvard	21:37 3/5

STATISTICS—UNIVERSITY BOAT CREWS 1900:

YALE.

Position.	Name.	Class.	Height, ft. in.	Wgt.	Age.
Bow.	W. B. Williams...	1900	5 10	160	21
2.	H. P. Wickes....	1900	5 11	168	21
3.	J. H. Niedecken...	1900	6 1 1/2	176	22
4.	P. H. Kunzig L. S.	1901	6 1 1/2	176	20
5.	J. P. Brock.....	1900	5 10	179	20
6.	F. W. Allen (Capt.)	1900	6 0	176	22
7.	A. S. Blagden...	1901 S.	6 1 1/2	169	21
Stroke,	A. Cameron, Jr.	1901	5 10	169	20
Coxsw'n,	G. P. Chittenden	1901	....	111	20
Average weight, 169 5/8 lbs.					

Cedar shell, 63ft. long, 23in. wide, 9 1/2in. deep amidships. Oars, 12ft. long (43in. inboard), with blades, 7 1/8in. wide. Slides on flat planes and about 18 1/2in. in length.

HARVARD.

Position.	Name.	Class.	Height, ft. in.	Wgt.	Age.
Bow.	N. Biddle.....	1900	6 0	164	21
2.	H. Bullard.....	1902	6 0 1/4	162 1/2	20
3.	C. B. Wood.... L. S.	2d	5 9	176 1/2	20
4.	W. Shuebruk....	1902	5 11 1/2	178	19
5.	W. E. Ladd.....	1902	6 1 1/2	178 1/2	19
6.	H. Bancroft.... L. S.	2d	6 2 1/2	176	20
7.	C. M. Sheafe (Capt.)	L. S. 2d	6 1 1/2	169	25
Stroke,	C. W. Harding..	1900	5 9	161	21
Coxswain,	H. A. Wadleigh	1900	....	101	23
Average weight, 170 11-16 lbs.					

Cedar shell, 64ft. long, 23in. wide, and 9 1/2in. deep amidships. The slides run on inclined planes, and are from 17 to 19in. in length, being adjusted to the needs of the individual oarsmen. Oars, 12ft. 1in. long, with blades 6 1/2in. wide. Oar-handles, inboard. 44in. in length.

PENNSYLVANIA.

Position.	Name.	Class.	Height, ft. in.	Wgt.	Age.
Bow.	Lester Kintzing...	1900	5 11¾	153	21
2.	Sam'l Crowther...	1901	6 0	161	20
3.	F. L. Davenport...	1901	5 11½	162	22
4.	G. S. Allyn.....	1903	6 0½	173	20
5.	Fred Stehle.....	1901	5 10	171	23
6.	J. B. Snover (Capt.)	1900	5 11	170	24
7.	Arthur Flickwir..	1901	5 11	173	21
Stroke,	J. P. Gardiner..	1901	5 9½	153	23
Cockswain,	L. J. Smith..	1901	5 3	102	21
Average weight, 164½lbs.					

Paper shell, 60ft. long, 24½in. wide. Oars, 11ft. 10in. long; blade, 7in. wide; slide, 20in.

WISCONSIN.

Position.	Name.	Class.	Height, ft. in.	Wgt.
Bow.	A. F. Alexander.....		5 8	152
2.	L. C. Street.....		5 11	156
3.	W. K. Herrick.....		5 11	150
4.	S. C. Welsh.....		6 2	180
5.	W. J. Gisbon.....		6 2	173
6.	W. C. Sutherland.....		5 11	171
7.	A. R. Anderson (Capt.)		6 0	169
Stroke,	L. A. Williams.....		5 11	152
Cockswain,	J. G. Dillon.....		....	106
Average weight, 163lbs.				

Cedar shell. Slides, 21in. Oar blades, 7in.

CORNELL.

Position.	Name.	Class.	Height, ft. in.	Wgt.
Bow.	S. W. Hartley.....	1901	5 10½	156
2.	H. E. Vanderhoef....	1901	5 9	157
3.	A. S. Petty.....	1902	5 10½	159
4.	R. W. Beardslee.....	1900	5 11½	160
5.	C. B. Smallwood.....	1900	5 11	163
6.	J. M. Francis.....	1902	5 11	159
7.	W. C. Dalzell, Jr. (Capt.)	1900	5 11	159
Stroke,	R. W. Robbins.....	1901	5 11	153
Cockswain,	G. E. Long.....	1902	....	105
Average weight, 158¾lbs.				

Cedar shell, 62ft. long, 22 5-8in. wide, and 9½in. deep amidships. Oar blades, 7in. wide. Slides, from 16 to 18in.

COLUMBIA.

Position.	Name.	Class.	Height, ft. in.	Wgt.
Bow.	R. E. Jackson.....	1902	5 7	140
2.	H. R. Burt.....	1901	5 8	150
3.	R. Coffin.....	1903	6 1	159
4.	F. Irvine.....	1902	6 0	158
5.	S. P. Nash.....	1901	5 9	168
6.	N. P. Vulté.....	1902	5 11½	161
7.	B. M. Falconer.....	1901	5 11	158
Stroke,	J. W. MacKay (Capt.)	1900	5 11	160
Cockswain,	M. G. Bogue....	1900	....	118
Average weight, 156¾lbs.				

Cedar shell, 62ft. long. Oars, 12ft. 2in. long. Blades, 7¼in. wide. Slides, 19in.

ANGLING.

SALT-WATER FISHING.

THE king of all our salt-water fishes is the striped bass (*Roccus lineatus*), also known along our coasts respectively as the "Rock-Fish" and "Green Head." Its season extends from April to November, of which, perhaps, the most enjoyable period is the latter part of September and October.

The striped bass haunts the surf, bays, estuaries and tidal streams. Its size may vary anywhere between two pounds and near one hundred weight, so tackle is an important matter. For creeks and estuaries of the coast, where the heaviest fish seldom exceed five pounds, an ordinary bait-rod of good quality, or a light tarpon-rod will admirably serve. Most of the prominent dealers offer at reasonable rates, rods especially designed to meet the rather rough service of surf-fishing. These rods are of ash and lancewood, Calcutta and Japan bamboo, or, if a more expensive tool be desired, of ash for the butt, the rest being the finest workmanship in split bamboo, with guides and tip of agate or cornelian. Needless to say these rods, if properly handled, will stand much service and land the heaviest fish.

The reel should be of good quality, and it must be a "multiplier," i. e., one in which the barrel revolves twice for every turn of the crank. For creeks and estuaries a reel which will carry one hundred yards of best linen line is large enough, but for surf-fishing the size

must be increased; two to three hundred yards of line is none too much. These reels should run as smooth and noiseless as the wheels of a bicycle, and they are made with bearings which insure this feature, so important in the casting.

The most attractive baits include menhaden, lobster tail, shrimp, shedder crabs, soft clams, blood worms, calico crabs, and small eels. In using lobster tail, it is peeled, one drawback being that one small lobster furnishes but one bait. This, however, is not too serious a matter, as the bait usually is very effective.

To properly cast with a bait outfit requires considerable skill. It is true that the bait assists greatly, but the line must go out smoothly and far and straight to the intended spot. In making the cast the rod is thrown back with something like a yard of line free. Then it is swept forward with a smooth yet decided action, with no jerk or snap, and the bait speeds away, the free-running reel paying out line as required. The reel is very apt to pay out too fast; but this very important matter can be controlled by the carefully judged pressure of the angler's thumb. The perfect regulation of this thumb-pressure is one of the fine points which can only be mastered by intelligent practice. Artists at it can cast the better part of one hundred yards.

Bluefish—"Horse-Mackerel," "Skipjack," etc. This game and voracious fish, scientifically termed *Pomatomus saltatrix*, is one of the best

of our sea fishes, and annually affords sport to a small army of enthusiasts. The season extends from June to November 1, and the range of the fish along the east coast is from Cape Florida to Penobscot Bay. It is taken in the surf, the open sea and in large bays. The young bluefish—"snappers"—haunt rivers and all tide-ways from August to November.

The favorite method of taking the larger bluefish is by trolling, or "squidding," and this is best done from a handy catboat. Long, strong lines equipped with pearl, metal or cedar squids are chiefly used. Occasionally a stiff bait-rod is used, the best sport with the rod being furnished by the young "snappers." For these an ordinary bass rod and tackle, with shrimp bait, will be found sufficient, and the fish are taken from skiffs, or wharves, on quiet bays and inlets.

A VERY lively form of bluefishing, for big ones, is heaving and hauling in the surf, where prowl the "tide-runners." A bathing-suit makes a first-rate costume. The only skill required is in getting out the long line, which requires some careful practice. The heavy jig is whirled about the head and let go at the proper instant, a feat not too difficult for an ordinary hand, yet one which must be mastered before the angler is safe company. The moment the line is straight, the fisherman puts it over his shoulder and at once marches up the beach. Older hands quite frequently haul in hand over hand, coiling the line for the next heave as they recover it, but the simplest way is the shoulder-haul.

Channel-bass, called alternately "Red-fish" and "Drum," *Sciarua ocellata*, are in season from June to November, in the surf and the mouths of bays, as far north as Barnegat. The average northern specimens will weigh about seven pounds. Tackle as described for striped bass is excellent. The bait is clam, mullet and the half of a crab.

Weakfish, or "Squeteague," from June to October, are taken with bait-rod or hand-line. It haunts the surf and tideways, and useful baits for it are shedder crabs, mussels, clams, surf mullet, sand laut and shrimp.

Blackfish, or "Tautog," from April to November, can be taken with light rod and hand-line. This fish hangs about old piling and sunken wrecks, and bites freely. An ordinary bait-rod is useful, but the commoner way is to fish with hand-lines having one or two small hooks. The best baits are clams, sand and blood-worms and shedder crabs.

Lafayette, or "Spot," are taken from August to October, in channels of tidal streams, with

tackle as for blackfish. Baits—shedder crabs, sand worms, clams.

Among other seafish from June to October are sheepshead, taken in surf and in bays. Baits—clams, shedder crabs and mussels. Kingfish, whiting, barb, etc., frequents surf and deep channels of strong tidal streams. Baits—blood-worms, shedder crabs, etc. From July to October the croaker haunts deep channels of bays. Baits—mussels and shedder crabs. Plaice, flounder, fluke, may be taken from the middle of May to the end of November, in the mouths of tidal streams and surf, with shedder crabs, killi-fish as bait.

In every section along the coast certain experienced fishermen have "good places," and tackle and baits of their own. The men of the sea are good fellows, as a rule, and the tactful stranger may obtain valuable hints by being a good fellow himself, aided by the judicious expenditure of a few dollars.

IN the month of August salt-water fishing is in full season on the Pacific coast, and when I was there last I had a new experience in fly-fishing. It was for the viviparous perch in the surf, and the fish took very greedily a grizzly king and royal coachman fly. These perches swarm in the salt waters of the California coast, and give good sport.

Anglers do not, as a rule, appear to fully appreciate the fruitful field of fly-fishing for salt-water fish, many of which will take on the shallows a moving bug as quickly and as greedily as they will seize the small crustacea.

WESTERN FISHING.

IT seems to be certain that some of the western fish begin rising or striking earlier than their congeners of the east and keep it up longer. This is true of latitudes as far north as New York City and higher up. In Wisconsin, Iowa, Minnesota and Michigan, the pickerel strike almost as soon as the ice is out of the streams, though in some of these commonwealths, and notably in Wisconsin, their taking is not permissible so early. By the latter part of May, however, both bass and pickerel are not only anxious for the spoon, but rise eagerly to the fly. The trout are even earlier. Bass in the Upper Mississippi will rise to flies until October, and some distance into that month. In late May and early June they rise best to some of the more neutral flies, as the "Fawn" bucktail or the "Dusty Miller." Possibly this is due to the fact that early in the season they are not so susceptible to irritation by the gaudy hues of the "Red Ibis," and kindred makes. Fly fishing in that part of the Union is not at its

best until the appearance of the millions of the water-bred insect known locally as the "June fly." From that time on, the bass will take almost any feathered thing. If it is not sunk so deeply as a well, and is not so wide as a church door, it will serve. Later than July, those who

want brook trout will find it pays to try a home-tied fly of dark body, with dull gold wrapping, fish scale wings and a liberal use of feathers from the head of the mallard drake. This is a fly that looks like a fly, and is taken because of appetite, not because of bad temper.

YACHTING.

IN NEW ENGLAND WATERS.

THE keen racing which is being afforded by the four boats of the H. O. class is a full justification of the action of the Regatta Committee of the Hull-Massachusetts Yacht Club in promptly adopting them as the "Hull's Own," after they had been cast out by the Y. R. A. of M.

Association men have since practically admitted their mistake, by asking the H. O. owners to enter in open races of Association clubs to help out the sport and the size of the starting fields. They more fully appreciated the mistake, when the H. O. owners politely declined to race with the South Boston, Columbia and Mosquito Fleet clubs at City Point in the open races of Fourth of July carnival week, on the ground that these clubs had voted against them in the Association, and that, therefore, no obligation to race existed. The H. O. boats found all the racing they needed at Hull and Quincy, while the City Point clubs were "shy" just that amount of sport.

These boats are proving so closely matched as to make it impossible to pick the winner on any given day. The win of *Al Kyris* by only 58 seconds over *Empress* in the race at Nahant for the Straine Cup, over a ten-mile course, is one instance, whilst the win of *Hanley* at Quincy a few days later, by almost as small a margin over the second boat, is cumulative evidence in the same direction. A fairly safe prediction is that it will be well toward the last of the season before it will be determined which of the quartette is speediest and best handled.

EACH succeeding race has shown a novelty on one of the boats, such as the springing of a small jib topsail by *Al Kyris*, or a brand new and very handsome suit of Ratsey sails by *Orphan*, the best the English sail-maker could produce. Tricks in handling have also shown the time, thought and skill being put into the sailing of the class.

The non-appearance of the H. O. boats in the city of Boston's Fourth of July regatta at City Point, after a class had been advertised for them and accepted by the owners, was, un-

der the circumstances, fully justified. The committee in charge, after receiving the acceptance of the H. O. owners, added to the announcement of the class the words, "or such other boats under 30 feet water-line as the committee may seem fit to admit." This would have given the committee power to have matched several possibly speedier boats against the H. O.'s, and the prompt declination of the latter's owners to be present at the race showed their feeling in the matter.

It will now be practically impossible to make the comparisons that were desired between the regular Y. R. A. cabin 25-footers and the H. O. boats, because to bring the latter to their best trim they had to be ballasted to a foot or more over the designed water-line length of 25 feet. The H. O. owners do not care, since they are racing among themselves under special ballast agreements, but the outside yachtsmen and the Y. R. A. men are sorry, because no fair test can be had on such different lengths.

WHETHER or not the keel boat can beat the centerboards under the restrictions for the Y. R. A. cabin 25-foot class, promises to remain unsolved until well toward the end of the season. *Flirt*, the enlarged keel race-about of Crowninshield design, certainly had the call over both old and new centerboards in the first two months of the season, and ought to lose nothing of her speed in the closing months. She is fast in all weathers, and particularly in the two extremes of light and heavy weather. There was great regret when she broke down before the start of Hull-Massachusetts open race, June 18, off Boston light, for the three-reef breeze and heavy sea, through which the wide and shallow *Al Kyris* thrashed to a win over the other centerboards, would have been a fine chance for the deep and powerful *Flirt* to have demonstrated the full value of the three-beam American cutter as originally brought out by Edward Burgess in his 40 and 45-footers.

The 21-foot race-abouts are thrashing through the season with the anticipated sport, the old boats holding their own against the new. With the season half over, the Foster fin-keel

Scapegoat, first of the type in her class, has not shown any decided superiority, even after having had her fin shifted forward or aft several times, as provided for in the building. Crowninshield's new *Jolly Roger* is also failing to come out ahead, but since his boats are notable for improving toward the last of the season, she may yet win another championship for him.

Coming down to the smaller classes, the Duxbury one-design 18-foot knock-about's are also furnishing sport, and are showing that their 450 square feet of sail is none too much for them. The failure of the Hull-Massachusetts class of this length to provide new boats is undoubtedly due to the restriction to 400 square feet of sail. The Regatta Committee of the club has assurances that new boats will be built if the sail area is increased, but it is too late to develop a class this season.

All in all, the season is proving to be in most ways as interesting as was anticipated, and it should not in any way depreciate in drawing toward its close.

W. E. ROBINSON.

NOTES.

THERE is not the slightest foundation for the yarn that the owner of the successful 70-footer is to be allowed to build the next defender of the *America's Cup*. The story was printed in a sensational newspaper and, for a wonder, was believed to be true by persons old enough to know better. I have been approached in sober earnest and asked in all seriousness if the rumor is true. It is untrue.

The *America's Cup* will be defended by the fastest "single-sticker" or "two-sticker" in existence. That means that in the case of a cutter the limit of 90 feet on the load water-line will be built up to. In the event of a schooner challenging, the limit of 115 feet will be reached. Length, in combination with other factors, gives speed. Until some genius produces a 70-footer that can beat a 90-footer on time allowance, no 70-footer will be a possibility in the racing for the *America's Cup*.

When *Volunteer* defeated *Thistle*, Lord Dunraven sounded American yachtsmen on the question of challenging with a 70-footer. He was given the straightest of answers. Challenge with a 70-footer, if you wish, he was told, but clearly understand that we shall defend with a 90-footer. That was the reason for the building of *Valkyrie II*, and *Valkyrie III*.

Beyond all question, a 70-footer embodies all that is desirable in a racing yacht. Her draught, while excessive from the point of view of a generation back, when the skimming dish ruled,

is moderate when compared with that of a 90-footer.

Some of the best harbors on Long Island Sound are barred to *Columbia*, but that famous craft was not built for cruising on the Sound. The object of her owner was to defend the *America's Cup*. It never occurred to him that a 70-footer would be cheaper to run. Nor did Sir Thomas Lipton look upon it from that standpoint.

The deed of trust, under which the New York Yacht Club is the custodian of the trophy, defines 90 feet as the limit of length on the water-line for single-masted craft; and 90 feet will be the length of the Yankee boat, no matter how much under that limitation the British challenger may be.

WOULD it not be absurd for a 70-footer, which isn't fast enough to beat the best boat we have, to carry off the *America's Cup*? Would the Britishers want to win that way? I doubt it. Fancy defending the cup with *Mineola* while *Columbia* is afloat! The whole nation would protest against such a match. *Mineola* is the fastest thing of her inches in existence, but Nat Herreshoff will tell you very plainly that *Columbia* can beat her easily, and give her double time allowance. So, if the English challenger should win with a 70-footer, it would mean nothing, so far as our fastest yacht is concerned.

As a matter of fact, the next cup defender will be chosen by the New York Yacht Club in the manner that has been so efficacious in the past. In other words, she will have to defeat *Columbia*, if a single-masted craft is selected as a challenger.

MINEOLA reaped the reward of an early launch and efficient tuning-up, by winning all the June races in which she had a class competitor. Good handling was doubtless an influential factor in producing this result. She beat the cup defender *Vigilant*, boat for boat, in two legs of the Larchmont course in a light breeze, *Vigilant* unfortunately grounding before the course was completed. This was a remarkable performance, no doubt, but *Vigilant*, it should be remembered, is by no means showing her old-time speed, so her defeat by *Mineola* should not be given too much significance.

One cannot help admiring the pluck and enthusiasm of William K. Vanderbilt, Jr., owner of *Virginia*. He hurried the yacht to New York before she was in fit condition to race, boldly entered her against *Mineola*, already in the pink of condition, and then sailed her

himself against the veteran professional, Wringe, leaving his own sailing-master to trim sheets. Mr. Vanderbilt has the unquestionable right to do whatever he pleases with his own yacht, for which he is said to have paid \$35,000, but, skilful helmsman as he is, it is possible that he may not have succeeded in squeezing all the latent speed out of his craft. For that reason, the relative merits of *Mineola* and *Virginia* cannot be said to have yet been decided.

THE poor showing of *Rainbow* can only be explained on the theory that her skipper has not yet "got the hang of her." As I write, *Yankee*, the last of the quartette to make her appearance, has had a few spins which are said to have been satisfactory, but most boats seem to sail fast on their trials, especially when there is no rival on hand to try conclusions against.

All the 70-footers, with the exception of *Yankee*, after their experience round about New York, were taken to Bristol for a general overhauling by Nat Herreshoff, who is probably the only man who knows why *Mineola* is so much faster than *Rainbow*.

I notice that according to the dimensions of the four craft, as given in the New York Yacht Club book, and probably approximately correct, *Mineola* and *Rainbow* are practically similar craft; the beam of the first-named being 19 feet 5 inches, while *Rainbow* is one inch broader. *Virginia* and *Yankee* are also two of a kind, their beam being 20 feet and their draught 15 feet, to the 14 feet of the first pair. The over-all length of each is 106 feet and the load water-line 70 feet.

IN the regatta of the New York Yacht Club, off Glen Cove, skipper Wringe, of *Mineola*, displayed a trick of sea-jockeying worthy of condemnation. It was at the start, and the victim was *Rainbow*, which had the right of way, being on the starboard tack. *Mineola*, whose place it was to keep away, held her luff. *Rainbow*, to avoid a collision, tacked, thus passing on the wrong side of the Committee boat and losing the advantage of the start. *Rainbow* did not protest. If the two craft had collided, *Mineola* would have had to bear the whole loss for a flagrant breach of the rule of the road at sea, for which there was not the slightest excuse. It was the duty of *Rainbow* to protest, Wringe's act being indefensible. Some owners strongly object to protests, but in the interest of sport the display of the protest flag is sometimes highly necessary. The Regatta Committee's decision that *Mineola* was at fault is approved by sportsmen and the rules of yacht racing.

IN the vicinity of New York the early regattas were not particularly favored by the weather. The clubs did all in their power to make the contests attractive, but a race day without a breeze is of no more use than a sailor without a knife. A number of circumstances combined to keep the new racing craft behind hand. The imported British cutters, *Astrild* and *Isolde*, were delayed in their passages across the ocean, and most of the new American craft were not "tuned-up" sufficiently for their true form to be demonstrated. As a matter of fact, a boat is seldom at her best till her second season. There are a few striking exceptions to this truism—*Gloriana*, for instance, in 1891, and *Mineola* this year.

Rear Commodore Robinson, of the N. Y. Y. C., has bought the British racing craft *Hester*. She is a 74.3ft. linear rating cutter, designed by Fife, and built by C. Hansen & Sons, at Cowes, in 1895, for Mr. John Gretton. She measures 82ft. 2in. over all, 69ft. 9in. on the load water-line, 8ft. 9in. in depth, and draws about 13 feet. All the flag-officers of the N. Y. Y. C. own sailing yachts this season. *Hester* was fairly successful during the two years she was raced by Mr. Gretton, but her record is in no way comparable with that of *Isolde*.

THE cruise of the New-York Yacht Club should be productive of fine sport, and *Mineola* is already the favorite for the Astor Cup. Among the new boats not yet in racing fettle, *Hussar II.*, built to sail in the same class as *Syce*, may be mentioned; also the 30-footer *Enpronzi*, the raceboats *Scamp* and *Raider*, and the open cat *Mongoose II.* These are craft that in time should make steady cup winners.

Only two schooners have sailed in racing trim in the early regattas—*Amorita* and *Quissetta*, two old antagonists. The first-named has been having the better of it, and seems likely to maintain her supremacy. It does not appear that *Quissetta's* deeper fin and more extensive sail plan have benefited her.

The New York Yacht Club has now a membership of 1,565, exclusive of 30 honorary members. Its fleet numbers 421 yachts, 87 being schooners, 118 cutters and sloops or yawls, 196 steamers and 20 launches. Of the sailing fleet, 6 schooners and 5 cutters have auxiliary engines.

The last volume of Lloyd's Register contains in its list 8,119 yachts, among which are 1,573 American yachts not measured according to Lloyd's rules; 3,943 are British, 388 hail from the British colonies, 598 belong to France and 429 to Austria and Germany. The sport, judging from these statistics, is flourishing.

IN spite of the glamor surrounding the racing of big and costly yachts owned by rich men, the small craft round-about New York constitute the life and soul of the sport. The classes are so many and the types so different that a lack of variety can never be pleaded, while, as the amateur is obliged by the racing rules to handle his boat, there is always present a certain vim and emulative dash lacking when the cold-blooded professional is at the wheel or the tiller. The pride of an owner in his craft is not measured by the ratio of water-line length or sail area, and a man is likely to wax more enthusiastic over the achievements of a little vessel skippered by himself than if she is a big racer controlled by a hired sailing-master, domestic or imported.

The masterly way in which most of the little craft that figure in our local regattas are handled compels admiration. Dead calms, black thunder squalls and ripping breezes have been frequent features of the present season, but as a general rule the amateur has been equal to the emergency. For instance, on July 7, in the regatta on Long Island Sound of the Riverside Yacht Club, a particularly savage squall gave the skippers of the mosquito craft a capital opportunity to display their seamanlike prowess. Never was seen a more exciting finish. Nearly all of the small fry that have fought such persistent battles since the season opened were racing. In class N were the sloops *Enpronzi*, *Alerion* and *Oiseau*. In the race-about were *Spindrift*, *Snapper*, *Persimmon*, *Raider*, *Colleen* and *Scamp*. In class P, sloops, those keen rivals, *Rochelle* and *Chingachcook*, were out for blood, while the fighting cats, *Dot* and *Windora*, were at it tooth and claw. The same applies to class T, cats, *Warda*, *Vagabond* and *Win or Lose*, and class V, cats, *Mongoose*, *Vera* and *Kazaza*. The 18-footers, *Kingfisher* and *Sandpiper*, were the only ones in that midget class to finish. *Sandpiper* was sailed by August Belmont, while *Kingfisher* was skippered by August Belmont, Jr. The craft were almost nip and tuck at the line. The father made a mistake and luffed up, thinking he had finished, whereas the line was not yet crossed. The son took advantage of the error, and shot past his rival, winning by four seconds. There were several finishes equally as close. Young Mr. Maxwell handled *Oiseau* in capital shape, cracking on sail and driving her over the line almost gun-wale under, a few seconds ahead of *Enpronzi*.

The day was remarkable for sudden shifts of

wind. The yachts, or, at least, some of them, shifted from balloons to bare poles, and back again. Almost every kind of sailing was seen, the result being highly creditable to the amateurs in charge. The scene I have tried to sketch is an object-lesson. It shows the enthusiasm and skill of the owners of the boats, the ability of the boats themselves, and, moreover, the great part the small craft plays in the popularity of the sport in New York and adjacent waters. One specific instance is more effective than columns of generalization.

MR. CORD MEYER, for private reasons, has been unable to race *Altair*, which, unless I am mistaken, is destined to lower the colors of *Syce*. She looks every inch a racer, and is a credit, so far as appearances go, to the Herreshoff yacht yard.

"YACHTSMAN," of New London, Conn., is informed that it is impracticable to give an accurate estimate for putting his schooner-yacht in commission. The cheapest way, and best, would be for him to draw up specifications for what work he actually requires, and obtain estimates from reliable men in the port where he wishes the repairs executed. For instance, burning off the old paint might cost little or much, according to its condition. A new set of sails, so far as cost is concerned, would depend upon whether the work was entrusted to a fashionable sail-maker or a circus-tent maker. The cost of bleaching the old suit would depend on whether it is badly mildewed. The price of plumbing work would naturally be high in any part of the country, but the precise amount for overhauling it would largely depend on the extent of repairs necessary. The expense of recovering cushions would depend on the material selected. Overhauling mattresses, on their present state. The price of lamps varies. Brass or copper come higher than galvanized iron or tin. Uniforms for sailors vary also in quality and price. A yacht sailor expects \$30 a month and his grub. He will kick unless he is fed high. Skippers, stewards and cooks have no fixed wages. A racing skipper might ask \$100 a month, or double that, while a cruising skipper might be obtained for \$50 or \$60. A chef employed by a swell yachtsman has been known to get \$250 a month. New running rigging would depend on the quantity and material required. It isn't sold like a shop-made suit of clothes.

A. J. KENEALY.



A. Grant, Penn,
Two-mile, 9.51 3-5.



M. W. Long, Columbia,
440 yds., 49 1-5sec.



G. W. Orton, Penn,
One mile, 4.23 2-5.



T. T. Hare, Penn,
16-lb. Hammer, 142ft., 10in.
16-lb. Shot, 40ft., 8in.



R. H. Sheldon, N. Y. A. C.,
16-lb. Shot, 45ft., 8¼in.
Discus, 121ft.



W. A. Maloney, Chicago,
440 yds., 49 1-5sec.



M. Prinstein, Syracuse,
Broad jump, 23ft., 7¾in.



J. W. B. Tewksbury, Penn,
100 yds., 10sec.
220 yds., 21 3-5sec.



T. B. McClain, Penn,
100 yds., 10 2-5sec.

Athletes Representing America in London and Paris.



W. P. Remington,
Penn.

Broad Jump, 23ft.



I. K. Baxter,
Penn.

High Jump, 6ft., 2in.



J. C. McCracken,
Penn.

16lb. shot, 43ft., 8 1-2in.
16lb. hammer, 149ft., 5in.



A. C. Kraenzlein, Penn.

120 yd. hurdles, 15 1-5sec.
220 yd. hurdles, 23 3-5sec.
Broad Jump, 24ft., 4 1-2in.



F. W. Jarvis,
Princeton.

100 yds., 10sec.
220 yds., 22sec.



* G. P. Serviss.

High Jump, 6ft., 2 1-4in.

J. M. Perry,

Half-Mile, 1.59 1-5

W. C. Carroll,

High Jump, Half-Mile, 1.58 2-5

A. W. Coleman,

Pole Vault,

H. S. Horton.

Pole Vault,

6ft., 2in.

One Mile, 4.23 3-5

11ft., 5in.

11ft., 4in.

* Not entered.

THE PRINCETON TRACK TEAM.

Athletes Representing America in London and Paris.

EASTERN COLLEGE BASEBALL REVIEWED.

FIRST of all it should be said that from the discussions which follow, are eliminated those colleges which do not enforce adequate rules covering scholarship and amateur status, such, for examples, as Georgetown, Holy Cross, Fordham and Manhattan. The limitations of space also preclude proper recognition of certain smaller institutions, where the ethics are all right, but the teams of relatively less importance.

The general standard of play for 1900 has been, taking the college baseball season as a whole, somewhat better than that of 1899. At one or two colleges, and on the part of individual observers here and there, exceptions may be taken to this general proposition, but to one who has observed many past seasons, and many games by many teams during the season just closed, it seems not to be difficult to maintain.

The important games of the year, with few exceptions, showed good form by the losers as well as by the winners. In the Yale-Princeton, the Brown-Yale, the Brown-Harvard, and the Princeton-Georgetown series, the quality of baseball was unusually high. The Yale-Harvard series was not quite up to the stand-

ard of the others named, but was still superior to that of the similar series in 1899.

For the fourth time in five years, the Princeton team won its Yale series, and for the first time on record won it in straight victories. For the first time since 1893, it failed to win its Harvard series, the result being a tie, one game for each team. Harvard's refusal to play a deciding game in so important a series (the *Harvard Bulletin* alluding to the Princeton game of May 26th, as "the first of the championship series") has caused much adverse criticism, some of it by Harvard men themselves.

IN accordance with the writer's custom of many years, the leading twelve college nines are grouped in three classes of four each, as follows:

I.—1, Princeton; 2, Brown; 3, Harvard; 4, Yale.

II.—5, Dartmouth; 6, Pennsylvania; 7, Williams; 8, Cornell.

III.—9, Wesleyan; 10, Lehigh; 11, Lafayette; 12, Amherst.

The Princeton nine played twenty-five games with college teams, losing only three—one to Georgetown, one to Brown, one to Harvard.

Paulmier, sub. fielder.

Hutchinson, 3b. Meier, s.s. Scott, sub. p. Kafer, c. Green, sub. c.

Chapman, l.f. Bradley, coach.



Watkins, c.f. Burke, r.f. Hillebrand, Steinwender, 2b. Pearson, 1b. Hutchings, sub. 3b pitcher and captain.

Princeton Baseball Nine.

In the last, Hillebrand pitched; in the others, substitutes occupied the box. Against Harvard, Princeton made 9 runs to 6; earned 5 runs to 1; made 14 hits for 21 bases as against 10 hits for 16 bases; made 3 errors to 6; and stole 5 bases to 3. Against Yale, Princeton made 14 runs to 7, earning 6 runs to Yale's 2; made 20 hits for 25 bases against Yale's 17 hits for 25 bases; made 6 errors to 7; and each team stole 8 bases. In the Yale-Harvard series of three games, Harvard made 13 runs to 17, earning 2 to Yale's 4; made 24 hits for 30 bases as compared with Yale's 31 hits for 39 bases; accepted 90.9 per cent. of her chances to Yale's 91.2 per cent.; yet she won the series because her fewer hits were better bunched and her errors came at relatively unimportant intervals.

The title "Championship" really means nothing. It is not intended to cover the general intercollegiate field, and when used by Harvard, Yale or Princeton, is simply a distinguishing mark of the importance which attaches to these series over all other games.

Although the Princeton-Harvard series remained unsettled, the general view seems to be in favor of the superiority of the former. The writer has submitted the question to members of college teams which have met both Princeton and Harvard, and without a dissenting voice this opinion has been confirmed. Princeton had a little the better battery, and was a heavier hitting team. Harvard had the stronger outfield, but Princeton's infield was superior. Harvard men have declared their nine to be "not inherently strong," but it has proved the best Crimson team since '93. Its weakest point has been the lack of spirit on the part of a few men on the team.

Brown won her series with Yale and Harvard, both of the latter presenting their best teams, and is clearly entitled to second place. Yale fielded better than Harvard, and quite as well, if not better than Princeton, but most of her men were wretched batsmen and disgracefully poor base-runners.

THE second group is headed by Dartmouth. She won her two games against Brown, whereas Williams was badly beaten by the

Providence men, and Pennsylvania could only win one game. Dartmouth's showing against Harvard was at least as good as Pennsylvania's, and far better than that of Williams. Pennsylvania's was one of the streakiest teams in the field; she nevertheless played some excellent games, notably the first Brown game and one against Georgetown. The only Eastern series which she clearly won was that with Lafayette.

Williams tied with Dartmouth at one game each, and defeated Wesleyan and Amherst for the Tri-College Championship; but she was badly beaten by Brown and Harvard.

Cornell was weaker than usual, feeling keenly the loss of men like Charlie Young and Miller. She lost her Princeton series by a wide margin, but her Pennsylvania series resulted in a tie.

Wesleyan secured second place in the Tri-College league, gave Brown about the worst defeat the latter had during the year, and played two close games against Yale. Lehigh is satisfied. She knocked out her ancient enemy, Lafayette, by two games to one, and beat Yale 10-8. Amherst hangs desperately on at the bottom of the list, her work having been no better than for several seasons past. She has played a few close games, but some of them have not even afforded good practice for her opponents. The team was quite a disappointment. It is curious better work should not result where the initial material is so excellent.

Stillman, p.
Wendell, r.f. Kendall, 1b.

Fincke, 2b.
Clark, 3b. Devens, l.f.



Photo by Pach Bros., N. Y.

Loughlin, c.f. Reid, c., Coolidge, s.s.
and capt.

Harvard University Baseball Nine.

AN Eastern All-College nine and its substitute or second team could be:

First team.		Second team.
Hillebrand (Pr.)	Pitcher	Washburn (B.)
Kafer (Pr.)	Catcher	Reid (H.)
Kendall (H.)	First base	Pearson (Pr.)
Collier (Penn)	Second base	Quinby (Y.)
McCarten (D.)	Third base	Crane (B.)
Meier (Pr.)	Shortstop	Coolidge (H.)
Loughlin (H.)	Fielders	Pingree (D.)
Clark (B.)		Tirrell (Wes.)
Russell (Wms.)		Cook (Y.)

From 1894 to 1898 the proportion of strong outfielders to the total number of good college baseball players was very marked. This year, however, the outposts are nearly all filled by weaker men, while the infields have greatly improved. This is particularly true at Yale, Harvard and Princeton, where the infields are surer, quicker and better in team play than in a number of years. The consolidation of all of their outfield squads, however, would not furnish one high-grade trio, and for that reason four of the six places on the All-Collegiate teams are filled from the smaller colleges.

Princeton's men were the poorest in many years, Watkins the best in fielding and throwing, being a very weak batter. Yale's only first-class man was Cook. Harvard's best was probably Loughlin, who, although weak in batting during the early part of the year, has fielded finely throughout. Wendell, a son of Prof. Barrett Wendell, is a player of marked promise. Pennsylvania had an excellent fielder in White, but he was too weak in batting to be considered for an All-College nine. Huston was much below his form for 1898 and 1899.

Russell, of Williams, was probably the best outfielder of the year. He covered large territory, was a sure catch, a beautiful thrower either to the bases or the plate, and a timely and accurate place-hitter. Much the same may be said of Brown's captain, Clark, whose home-run settled that great fourteen-inning game with Yale.

Tirrell, of Wesleyan, has worthily upheld the name and fame of his two brothers of '94 and '96. He has dropped but one fly-ball this year, and has saved his pitchers from many a long hit. Pingree, of Dartmouth, has played a fine fielding game, and is a heavy hitter and fast base-runner.

HILLEBRAND is once more the best pitcher of the year, and closes an unparalleled record. He has represented Princeton in every football and baseball game played against Yale during his college course, and has seen six victories out of the eight contests. No other athletes, excepting Gill of Yale (1885-89) and Newell of Harvard (1890-94), can approach

this record. Gill played on five football teams and rowed on three crews, helping to win six victories for the Blue. Newell competed on four football teams and three crews, but only one of each proved victorious.

Of the other college pitchers, Washburn of Brown and Stillman, the Harvard freshman, have shown the nearest approach to Hillebrand's form, each being credited with occasional displays of the highest skill. Washburn was hit hard in the second Princeton and first Pennsylvania games, but he was tired and lame. Stillman has been very erratic, pitching a four-hit and ten-strike-out game against Princeton on one occasion, and being hammered all over the greensward on the next. He has good curves and sometimes better control than Hillebrand. His speed seems to be the valuable factor.

Robertson of Yale is a curious combination of strength and weakness. His curves are practically *nil*, but he usually opens the game with effective speed. With him "nothing succeeds like success," and until a chance combination of hits and errors brings on a crisis, he is the embodiment of strength. Once the crisis comes, however, he promptly embarks in a great holiday balloon ascension, considerably putting waist-high balls over the plate, carefully restrained as to speed.

Lufkin of Wesleyan is one of the best pitchers of the season. He has held Brown down to three hits, and has kept those of other strong teams well scattered. Wilder, his running mate, is a freshman pitcher of rare promise. He has quick curves, excellent speed and a good head.

Plunkett of Williams tore the muscles of his elbow early in the year, so Bent has been the best pitcher for the Purple. He has good speed and fair curves. Varney has been Dartmouth's most reliable pitcher. He has very sharp curves, and, for a left-handed man, good control. Cornell, Lafayette and Amherst have been weak in the box.

Among the catchers, Kafer and Reid are easily the best, the latter being as good as the veteran Princetonian in all but two respects. He has not batted so well in the big games, and he lacks Kafer's never-say-die spirit. Flavell of Pennsylvania, Whittemore of Brown and Inglis of Wesleyan, follow in the second class. The last-named has made the greatest improvement, and there are no better men in the colleges, save Kafer and Reid. Brown of Dartmouth, although a freshman, has made his mark in sure backstop work and clean, hard hitting. Edwards of Williams catches and

throws well, but, unfortunately, is a very weak batsman.

FIRST basemen are, as usual, a problem this year, but for a diametrically opposite reason. In bygone days it was hard to select the best among so many strong hitters. This season, however, the difficulty is to find one who has batted up to the mark. All of them field well, notably Kendall of Harvard, Pearson of Princeton, Sharpe of Yale and Risley of Williams; but some of the college first basemen this year come perilously near meeting the unique description made by a popular writer, of a certain player who "couldn't fall out of a boat and hit the water." The situation isn't quite so desperate, but it is 100 to 1 that a weaker lot of hitters have not guarded the first corner of the diamond in many years. In giving the place to Kendall, therefore, with Pearson as substitute, it should be remembered that the mantles of such former players as Kelly, Rodman, Letton, Bustard, Goeckel, *et al* are something of a misfit. Of the present incumbents not yet named, Detmers of Brown and Hancock of Dartmouth have each done good work. Robertson of Cornell is also an excellent fielder.

OF the second basemen, Collier of Pennsylvania is easily the shining light, and would have made any college team in the country. He was the star of the Pennsylvania team, with a voracious maw for all kinds of infield hits, a sure aim, a deadly eye, and base-running of speed and judgment. Quinby, with a trace of the unsteadiness of his brothers of '95 and '96, has surpassed their records, especially in the big series. Against Princeton he made 4 hits for 10 bases, and accepted 14 out of 16 chances; against Harvard, 5 hits, 16 chances and 3 errors, all of the latter occurring in the last part of the third game. Steinwender has played hard, snappy and high-class baseball for Princeton. Fincke's work for Harvard has been fair, but he has not been able to cover as much territory as have the other men named. Bacon of Brown has been strong in all but his throwing. Other men, such as McNaughton of Wesleyan, and Street of Williams, have done efficient, although uneventful, service.

The man who ought to lead the third basemen is Terrell of Wesleyan. The man who does lead them is McCarten of Dartmouth. A beautiful fielder and thrower, a reliable hitter and a keen, heady base-runner, this young man has fairly earned his place. Terrell's work

has lost some of its gilt-edge for some other reason than inability—probably lack of wholeheartedness. Hutchinson of Princeton is the fastest man on sharp baseline hits, and is a very pretty fielder, but is too weak at the bat. Clark of Harvard is erratic and Guernsey of Yale lacks force and dash. Crane is the best man, excepting Lauder, who ever played the place for Brown.

THE shortstops are quite good this year, Meier getting the call on his superb hitting. He can play any position in the field acceptably, and has been a diamond indeed for Princeton. Coolidge is the best shortstop Harvard has had since '93, but French, the Dartmouth captain, and Heffernan of Williams are about as good. All of them, with Anderson of Wesleyan thrown in, are of unusually high grade. Indeed, I have never seen five such shortstops on the college field in one season. Orbin of Pennsylvania was brilliant, but not sure, and was weaker than the others in hitting. Camp of Yale has played four years of good baseball, fully up to the high standard of the Blue, and retires with general respect for his wholesome, manly personality.

The season as a whole has been enjoyable, fair weather, keen interest, exciting episodes and, as a rule, clean sport, predominating. There has been far too much talking by the players in the field, and now and then, under the stress of circumstances, home audiences have overstepped the bounds of courtesy in attempting to "cheer out a victory;" but generally the sport has been good and the standards high, and the college baseball season of 1900 leaves chiefly pleasant recollections to true sportsmen.

YET it leaves also a deep regret among college men that nothing definite has been done by university faculties to put an effectual stop to the "muckerish" coaching and occasional foul play which, although of not common occurrence, yet happens often enough to very much disturb university men who have been graduated long enough to be without unreasoning partisanship.

College baseball needs, sorely, a second umpire to rule on foul play, and some ruling by university faculties that will deal severely with the player who behaves in an unsportsmanly manner. It is very easy now to check rowdy behavior before it becomes general; but if it is not checked, this splendid college game will surely fall into disrepute, as the professional game has.

CHARLES EDWARD PATTERSON.

THE THOROUGHBRED.

WHILE Ethelbert is still before the public as a race-horse pure and simple, the students of breeding are naturally looking forward to his career in the stud. His family is not among the Great Families of the Figure Guide, but its comparatively few great lines are thoroughly able to take care of themselves. Domino, for instance, sired a genuinely creditable representation of winners during his brief career, and Ethelbert may be expected, with intelligent mating, to furnish us with really worthy sons and daughters.

It is a somewhat interesting fact that Ethelbert's sire, imported Eothen, was badly beaten upon the occasion of his only public appearance on a race-course, but, as a matter of fact, his career was prejudiced at its very outset by a training accident. He was a grandly-bred horse, however, being by Hampton out of Sultana, she by Oxford out of Besika, she by Beiran, out of Merope, this latter mare being the granddam of the immortal *Topin*.

Ethelbert's dam, imported Maori, may be said to have well supplied whatever winning parentage was lacking in Eothen, as she was a very good winner in this country late in the "eighties." Then, too, her full sister, Limasol, won the English Oaks in 1897, while a half-sister, Cypria, dead-heated for the Cesarewitch of 1893. Maori is by Poulet out of Queen of Cyprus, she by King Tom out of Cypriana, she by Epirus out of Cyprian, by Partisan. Cyprian was herself a winner of the Oaks, and produced Songstress, also an Oaks heroine. From all this, it will be seen that Ethelbert's lineage is thoroughly favorable to production of a great winner.

THE present generation of English turfmen will always be peculiarly memorable as having included the most successful of all the many horse-owning and horse-loving representatives who have been furnished to the turf by the royalty of the kingdom. The present Prince of Wales had already made a record among the ranks of owners in general, by following Persimmon's Derby triumph of 1896 with the victory of Ambush II. in the present year's Grand National Steeplechase, the "blue ribbon" of the 'cross-country sport. Diamond Jubilee's recent Derby, however, has enabled the Prince to break all records of the royal family as well, and his is now the proud distinction of being the only one of the line to score a second Derby.

THE recent purchase of Sandringham, the St. Simon—Perdita II. foal of 1896, for Mr. John E. Madden, the well-known American turf-

man, makes the Prince of Wales's triumphs with the mare's three other great sons particularly interesting to us at this time. Sandringham himself never raced, owing to training troubles, but there is not a shadow of doubt that his early indications were of the highest promise, otherwise his party would hardly have persevered so long in their efforts to get him to the post for the valuable engagements from which they so steadily declined to declare him. It is not often that a horse who was untried on the race-course merits patronage in the stud. Imp. Order's superb blood—by Bend Or (sire of Ormonde) out of a sister to St. Simon—fully qualified him as an exception, however, and the American turf would appear to be equally fortunate in now securing the recently-purchased brother to the Prince of Wales's trio of great winners.

WHILE the American-bred race-horses have this year been making a decidedly disappointing showing in England, contrasting most strangely with their achievements of recent seasons, our jockeys have been fairly outdoing their brilliant efforts of the past. It is small wonder, therefore, that "the American style" of riding, which may be concisely termed a "crouching" attitude, is the talk not only of England, but of the entire racing world.

The American style is undeniably an advantage to a horse's prospects in a race, if only for the reason that the weight of the jockey's body is more toward the withers than upon the animal's back. This forward transfer of the weight was, in 1899, demonstrated by the experiments of a well-known English trainer to make an improvement of virtually "a stone" (fourteen pounds) in the form of those of his horses which were thus ridden in their trials. It is surely an eloquent commentary upon the matter that his own stable jockey began to ride with vastly more than his accustomed success, the very day upon which he adopted the "crouching" attitude.

Another great benefit the American style has and one upon which entirely too little stress has been laid, is that the jockey presents less resistance to the air "when under the lee" (so to speak) of his horse's neck than when sitting comparatively upright—or, at least, with his body presenting a second resistance to the air—as in the old style. The fundamental principle of the "cigar-shaped train" applies here with great force, and recent English records show that the American style of riding is almost immeasurably superior in a race against a strong head wind.

W. H. ROWE.

PHOTOGRAPHY.

THE BICYCLE AND THE CAMERA.

THOSE who combine bicycling with photography and do not care to burden themselves with a tripod, can, by the following method, make time-exposures without risk of movement:

Turn the bicycle at right angles to the line of view, and lean it erect against the body. If the camera is then rested on the top bar, exposures of almost any necessary length may be made.

HOT WEATHER TROUBLES.

THOSE who employ printing-out papers of the gelatine variety, and in hot weather find them softening so as to be almost unworkable, will find a perfect cure by adding a few drops of formalin to the toning solution, about one drop to each two ounces will have the necessary hardening effect, without interfering with the action of the toning bath.

TRUE GRADATION.

At least ninety per cent. of all modern photographs have one serious fault in common, a lack of true gradation. There is a want of detail in the shadows, and a scattering of high lights all over the print; the former due to under-exposure, the latter sometimes to forcing development in the hope of securing that detail, but more frequently to a natural tendency of the lower lights to become opaque in the negative, and to appear as high, instead of half lights in the print.

To overcome this, the method hitherto employed has been the weakening of the reducer or so-called density giving constituent of the developer, the pyro, or whatever may have been employed in its stead. That having been only partially successful, photographers will be glad to know of something which is said to be altogether so.

The new addition to the *materia photographica* is potassium borotartrate, and what its introducer, Mr. Ben. E. Edwards, claims for it may be called the power of selective restraint. The restrainers hitherto used are potassium bromide, and sodium or potassium citrate; but their action is general, holding back the less as well as the more highly impressed parts of the image, the shadows as well as the high lights, and on the whole, tending to hardness rather than to delicacy of detail, to few rather than to many steps in the degree of gradation.

Potassium borotartrate is in white shining crystals easily soluble in water, and may be conveniently kept in a ten per cent. solution. When employed instead of a bromide as a re-

strainer, it seems to possess the peculiar property of restraining the action only on the higher lights; and where the exposure has been anything like correct, preventing them from getting beyond a reasonable degree of density before the shadows have acquired sufficient strength. From two to three grains—20 to 30 minims of the solution—should be added to each ounce of the normal developer.

The most successful experiments so far have been with pyro and kachin as developers, the action with hydroquinone and glycin seemed less marked. As it becomes better known, there can be little doubt, it will be found, under suitable modifications, equally effective with all, or most, of the reducers.

PHOTOGRAPHY BY REFLECTION.

THERE is nothing new in photographing objects reflected by a mirror, although its practice has hitherto been confined mainly to a style of portraiture in which both the figure and its reflection were shown. But an impetus has been given to it and its possibilities for portraiture, by a charming little picture from the brush of Lady Alma-Tadema.

Taking advantage of the well-known principle of the once popular "Pepper's Ghost," she has painted the portrait of a pretty child on the glass of the window, but so as to convey the impression of its being projected considerably beyond it, and the effect is admirable. Photographers have not been slow to take the hint, and already there have been some very pretty results shown; the necessary conditions are a perfectly clean glass, a brightly illuminated figure and a dark background.

More important, however, for the amateur at any rate, are the reflections from mirrors. They afford opportunity for even high-class portraiture in the ordinary room. The larger the mirror and the thinner the glass the better, although on the ordinary dressing bureau, very interesting portraits can be made. As the camera will be on the same side of the mirror as the sitter, only about half the ordinary space will be required, and by draping the mirror, placing it at various angles, and using reflectors to direct the light on the figure, there is hardly a limit to the variety of effects produced.

As the silver on the back of the mirror gives a double reflection, it should be as thin as possible, although the image from a glass of average thickness shows hardly more than a softening, which, from an artistic point of view, is more to be admired than where the lines are sharp.

DR. JOHN NICOL.



"WHEN I CAME TO, THE LION WAS STANDING OVER ME WITH HER CLAWS IN MY SHOULDER."

—*A Hand-to-Hand Battle with a Lioness*, p. 609.

OUTING

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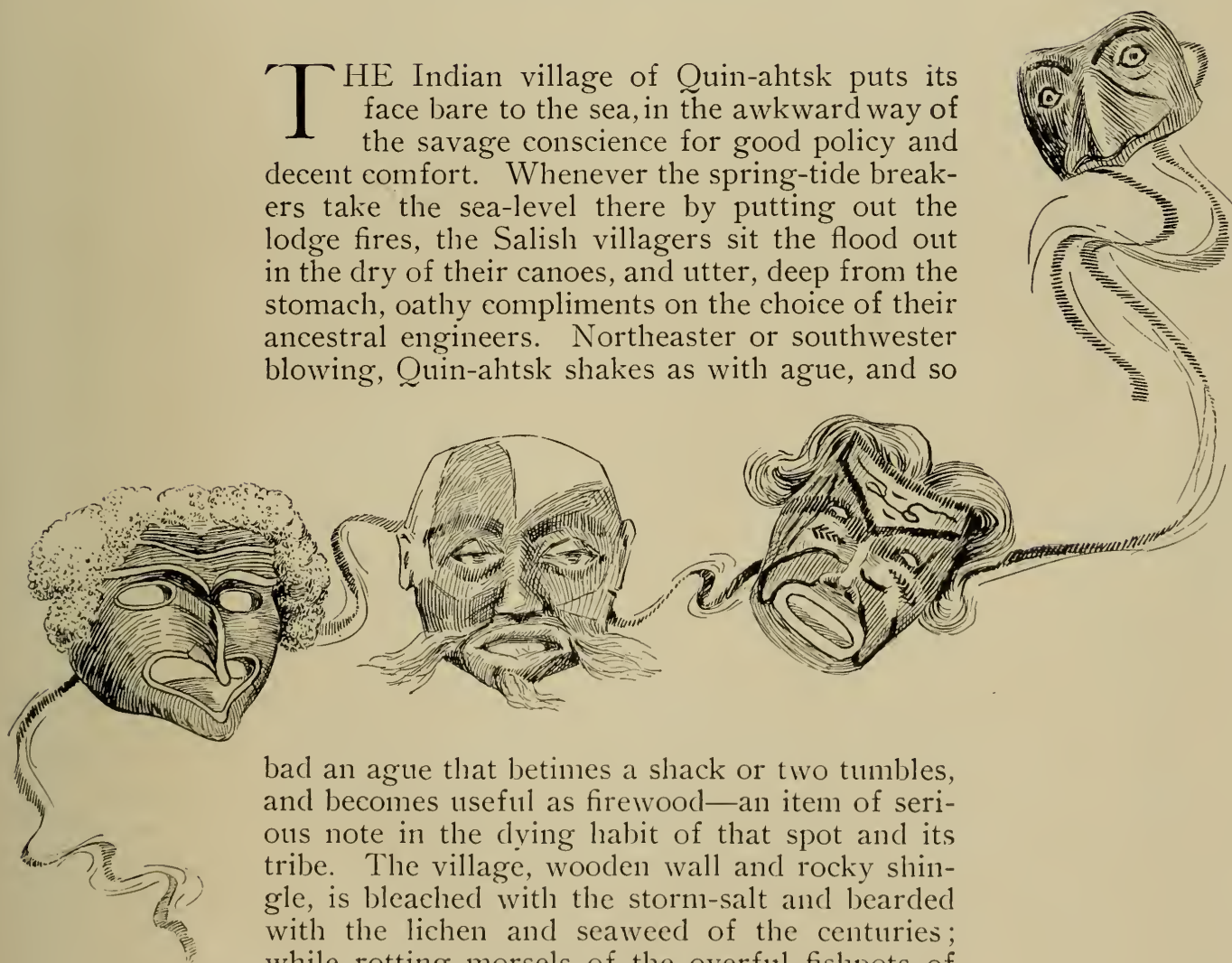
No 6.

THE QUIN-AHTSK'S QUIT.

A TALE OF A SACRIFICE.

By Fitzherbert Leather.

THE Indian village of Quin-ahtsk puts its face bare to the sea, in the awkward way of the savage conscience for good policy and decent comfort. Whenever the spring-tide breakers take the sea-level there by putting out the lodge fires, the Salish villagers sit the flood out in the dry of their canoes, and utter, deep from the stomach, oathy compliments on the choice of their ancestral engineers. Northeaster or southwester blowing, Quin-ahtsk shakes as with ague, and so



bad an ague that betimes a shack or two tumbles, and becomes useful as firewood—an item of serious note in the dying habit of that spot and its tribe. The village, wooden wall and rocky shingle, is bleached with the storm-salt and bearded with the lichen and seaweed of the centuries; while rotting morsels of the overful fishpots of the folk cast up what might seem the senile breath of the place; an odor as if the Pacific had dumped most of its finny dead in that neighborhood.

What little quality of heaven ever blessed Quin-ahtsk had been rudely banished for a full week's space. Every God-seeking sinner of the



*Indian
canoe,
paddle,
baskets,
and fish-
net of the
hop-pickers.*

tribe had seemingly loaned his lungs to his anxious soul, and night after night the guttural notes of the Salish song rose mightily (and all modester noise was smothered) to the Manitou of their fear, the great Che-thah-liskh.

Sheer from the surf towered a great cliff, and on its bare, wind-riven top lay buried the legions of the nation's dead; they and the whitened bones of their cayuses (the seabirds ever hawk that rock for a carrion feast), and their hunting gear and canoes, all ready for the great trail beyond. It was in this company of their dead that all the healthy quick of the Quin-ahtsk danced and sang—and to the dismay of all their earthly audience.

The wary sea-lions blinked at the fire which blazed against the sky, and wondered at the yelling devils jumping in the clouds; the otter, carried on the ocean current, awoke from their slumber and swam swiftly below the horizon; the sea-gulls flew whistling from the cliff, and every other wild creature fled away. Night after night the mouthy Indians danced about their dead, and sang with the surf's never-ending requiem below. Often the village hounds caught up the chant, and howled dismally, as if they, too, had a place to watch in the eternity of things. In truth, in lieu of the help of a heaven, Quin-ahtsk seemed to have invoked the well-trained chorus of a professional hades.

One night, before the dance, Medicine Mak had paddled down to the village from his forest workshop (a smithy of gods) and had called a caucus in the village smokehouse—a lodge serving for salmon and elk-meat smoking in season, and politics and fetish worship the year round. The great spirit had sent Mak a message of two mighty words:

"Quin-ahtsk ahtaman!" "Quin-ahtsk will die!"

The simple sentence was perhaps not more an omen than an awful fact written deep in the wrath of the medicine king. For the number of Quin-ahtsk at that day was but ten score. Ten score of as many thousands in the days before the white-man came; before reservation lines marked the



deadly restraint; days before the leprous diseases swept that grand Pacific shore, when the white-man was unknown to the Eves of the far-western forest! Strange doom; awful sacrifice of a primitive nation on the path of progress! And terrible bitterness that fate bred in the hearts of the red!

The genius of Medicine Mak had devised the dance in the graveyard to chant the message. At times the hoarse serenade had been stilled, as all listened gaping to mystic soul-scaring solos of their fetish oracle. Some fetish skeptics there may have wondered what juggler's scheme the cunning old man had in his head, or what devilish plot his fetish mantle was again to foster and cloak. A few of the bucks may have been partners in it, and as true it is that one or two may have quaked with terror as they heard Medicine Mak's mystic chants—as when others, not primitive fellows of the woods, hear the sermon's scathing of their secret sin. Deep was the cunning of Mak, and bitter in his heart the hate of his people's dying.

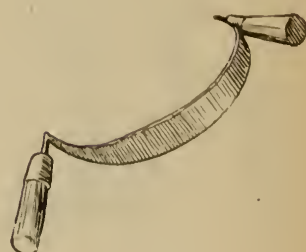
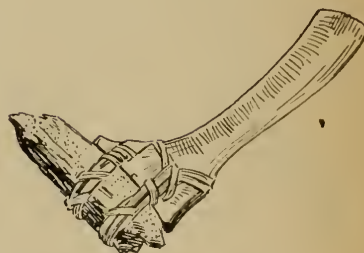
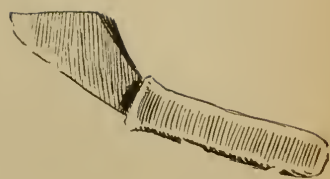
When at last the dance broke up, and each wondering, tired worshiper went his way, a few of the older bucks, bunched together, eyed two of the younger secretly, and with red hate in their eyes—and Medicine Mak's eyes were reddest.

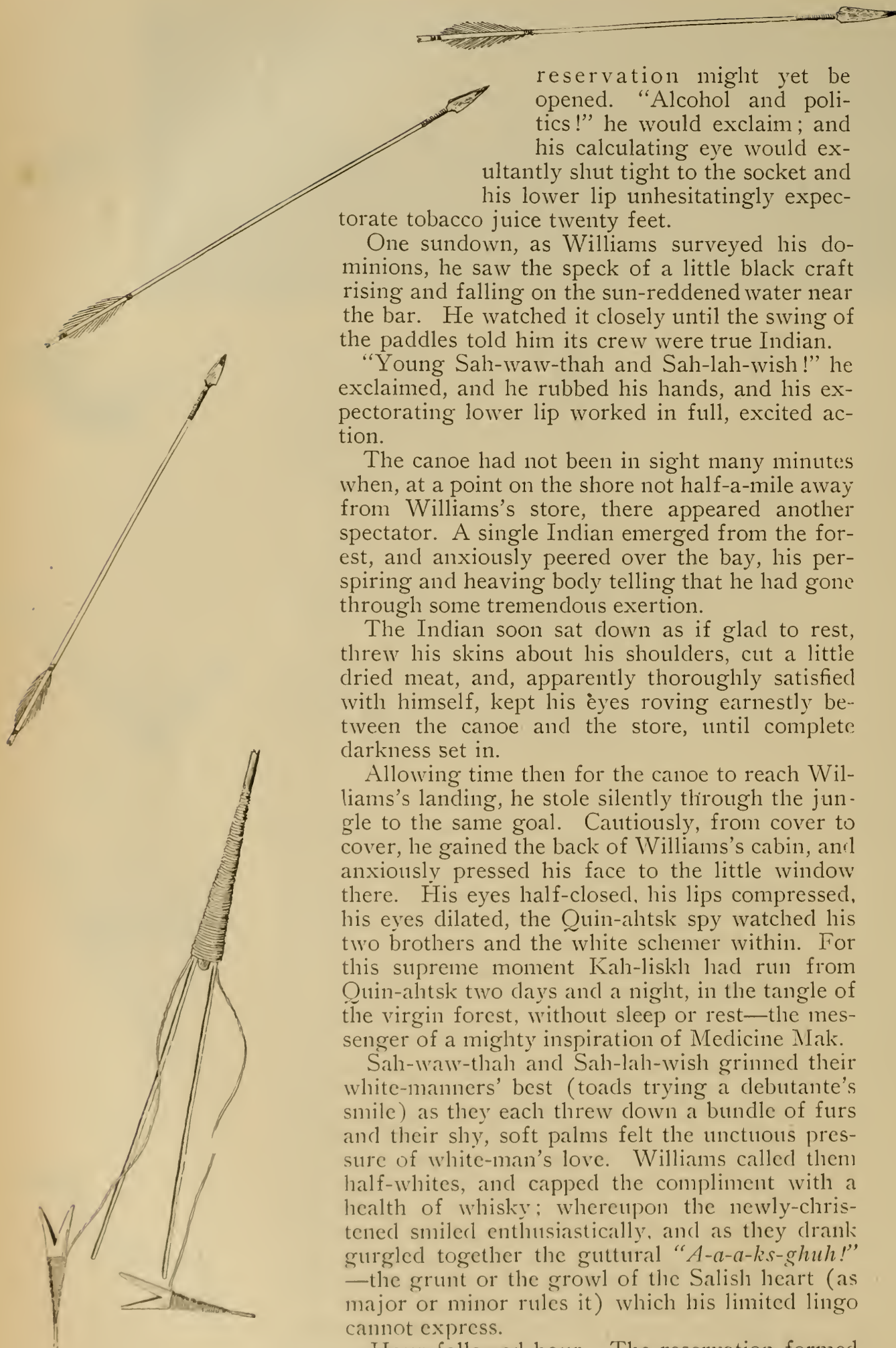
"*Quin-ahtsk ahtaman!*" he hissed. "Young Sah-waw-thah, young Sah-lah-wish, white-man friend!" And he laughed. The humorous side of the Indian is sometimes difficult to explain.

* * *

South of the reservation was the Tsi-ha-lis River bay, and, though more of mud than water, it was confidently dubbed a harbor by the only inhabitant, a white genesis of human hundreds to come. Williams, in an hour of excessive genius, had determined to chance his fortune by awaiting, after the unsocial way of the border pioneer, the tide of civilization to come to that then lone edge of the North Pacific. The Indians' reservation was the speculator's only sore. Real estate could not boom, and the masts of commerce could never decorate his harbor, until the reservation was opened. This problem, during the many years of his commercial exile, had, in fact, caused one of his eyes, from chronic calculation, partly to close. The other eye he wore wide-awake to gaze over his vast dominions, or, as if he feared some counter speculator, or some Satan-sent purchaser, in his promised land. From emphasizing his future's greatness also the squatter's chin was now of the prominent, expectorating sort.

By trading whisky to his Indian neighbors Williams kept alive. He took comfort also that, in the course of good nature and persuasive alcohol, the





reservation might yet be opened. "Alcohol and politics!" he would exclaim; and his calculating eye would exultantly shut tight to the socket and his lower lip unhesitatingly expectorate tobacco juice twenty feet.

One sundown, as Williams surveyed his dominions, he saw the speck of a little black craft rising and falling on the sun-reddened water near the bar. He watched it closely until the swing of the paddles told him its crew were true Indian.

"Young Sah-waw-thah and Sah-lah-wish!" he exclaimed, and he rubbed his hands, and his expectorating lower lip worked in full, excited action.

The canoe had not been in sight many minutes when, at a point on the shore not half-a-mile away from Williams's store, there appeared another spectator. A single Indian emerged from the forest, and anxiously peered over the bay, his perspiring and heaving body telling that he had gone through some tremendous exertion.

The Indian soon sat down as if glad to rest, threw his skins about his shoulders, cut a little dried meat, and, apparently thoroughly satisfied with himself, kept his eyes roving earnestly between the canoe and the store, until complete darkness set in.

Allowing time then for the canoe to reach Williams's landing, he stole silently through the jungle to the same goal. Cautiously, from cover to cover, he gained the back of Williams's cabin, and anxiously pressed his face to the little window there. His eyes half-closed, his lips compressed, his eyes dilated, the Quin-ahtsk spy watched his two brothers and the white schemer within. For this supreme moment Kah-liskh had run from Quin-ahtsk two days and a night, in the tangle of the virgin forest, without sleep or rest—the messenger of a mighty inspiration of Medicine Mak.

Sah-waw-thah and Sah-lah-wish grinned their white-manners' best (toads trying a debutante's smile) as they each threw down a bundle of furs and their shy, soft palms felt the unctuous pressure of white-man's love. Williams called them half-whites, and capped the compliment with a health of whisky; whereupon the newly-christened smiled enthusiastically, and as they drank gurgled together the guttural "*A-a-a-ks-ghuh!*"—the grunt or the growl of the Salish heart (as major or minor rules it) which his limited lingo cannot express.

Hour followed hour. The reservation formed the main text of the speculator's talk. The Indians' badgered, simple, minds imbibed their host's

inoculating politics as eagerly as their stomachs sponged the encouraging fire-water. The young red fools became great white chiefs in a grand city on the harbor, and owned ships which sailed around the world.

"To h—— with the rez!" voted Williams. "The tribe's nearly dead, anyhow!"

"*A-a-a-a-gh-sk-ghuh!*" seriously agreed his audience, as they swallowed liquor.

Williams tapped another drink for his friends, and edged nearer. "Open the rez!" he exclaimed, dramatically; and continuing in the meager, broken talk, and with the many motions of the rude Salish oratory, he unfolded the scheme of his real-estate ambition—the mania of half his life:

The whole tribe would soon migrate to Oregon to pick hops. Returning to the village, the hop-pickers would camp some days on the harbor to spend their earnings at the store. Sah-waw-thah and Sah-lah-wish would then set out, the great ambassadors of the Quin-ahtsk, to pray the great Yankee Father to open the reservation. To forestall possible suspicion by the tribe, the ambassadors would get gloriously drunk during the hop-pickers' gala, they would set out, their canoe would be found bottom up, and, finally, perorated the diplomat:

"Sah-waw-thah, Sah-lah-wish, dead drown! Rez go dead!"

The messenger of the far-seeing fetish king had remained a statue carved on the cabin wall without. The red hate had rushed to the head of Kah-liskh (and the hate of the redman is not refined) as he had heard through the window-pane the bitter truth on the dying state of his people; and he quivered with anger as he caught from the white schemer's lips the very prophecy of the cunning Mak, "Quin-ahtsk go dead!" The spy's mission had not been in vain.

The Indians in the cabin followed the climax of their host's oration with a long series of acquiescing grunts, "*A-a-a-a-ghs-ghuh!*" which Williams concluded by a slap on the back.

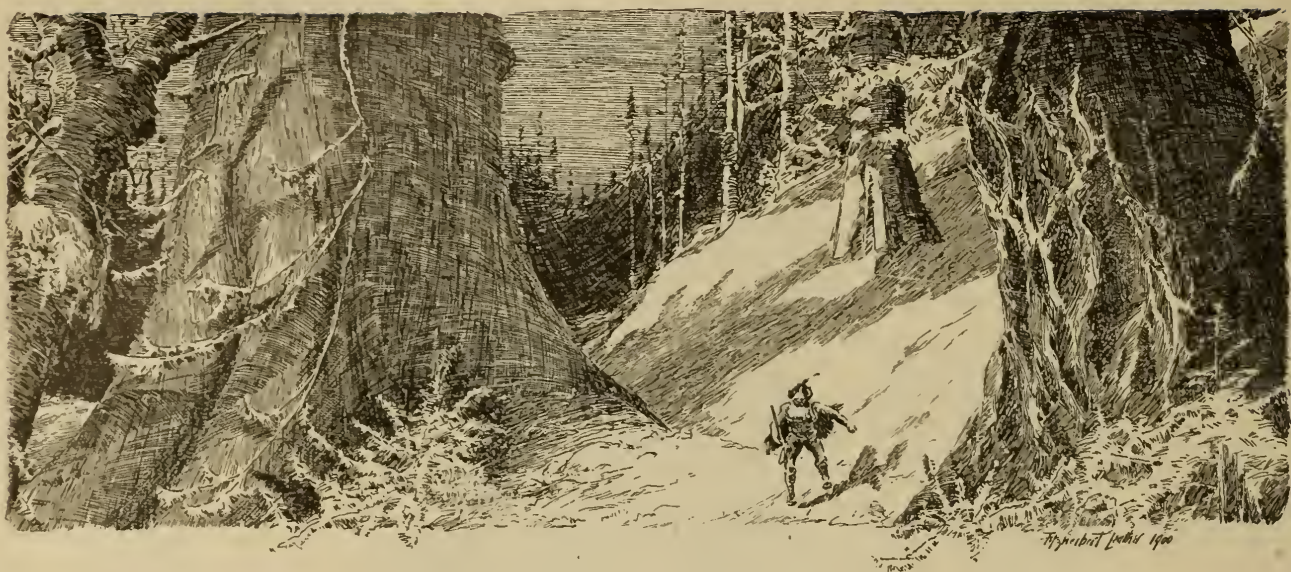
Satisfied then with his night's work, and as his guests had about drunk the price of their furs, he advised rolling up for the night; so they wrapped their drink-soaked carcasses in their mackinaws, forgetful of the terrible omens chanted at the village, of the awful message of Mak—all forgotten under the fumes of alcohol. The only point in Williams's plot they remembered as they rolled on the floor was its pleasant ruse. They repeated with a laugh from their thickened throats:

"Sah-waw-thah, Sah-lah-wish, drunk, dead drown, Tsi-ha-lis-bar! *A-a-a-a-ghs-ghuh!*"

* * *

Kah-liskh crept into the forest, eager to tell his





*"Through the
wood and brake
night and day
Kah-liskh ran,
stopping only
to drink deep
of some creek or
eat a morsel of
meat."*

discovery to his waiting friends at Quin-ahtsk. Often the forest was black in front of him. The nourishing dews of the maternal Pacific shed their floods over all that land, and foster giants that reach to heaven and spread branch and leaf against all its light. The gnarled old maples (their youth in the ages gone) and their dank curtains of moss trailing the earth; the fir and the cedar titans (stout youths of centuries), their topmost petals seen only by the soaring eagle; and rotting trunks of the fallen forest fathers (a thousand years had worn them out) glorifying their death by an all-pervading incense. Under these towers, through the wood and brake, night and day, Kah-liskh ran, stopping only to drink deep of some creek or eat a morsel of meat. The second sundown the runner reached the lodge of Mak. The fetish chief and others were waiting.

As the spy told his story, the tone of his listeners' "*A-a-a-a-ks-ghuhs!*" grew deeper — red-men's heart-strings straining with fearful emotion, and fuel to fire the ever-galling memory of the extermination of the race. The face of Molak set to the mould of cold-blooded revenge. Chach-ak-chach leaned his livid face over the fire (and his anger did not know his face burned) as he swore to the others the death of the traitors. Quah-laysh said they should be shot.

But Mak had been silent, as slowly his eyes burned with all the cunning that he could conjure to his wily head. Slowly he opened his lips, as he breathed word for word one sentence in Kah-liskh's tale:

"Sah-waw-thah, Sah-lah-wish, drunk, dead drown, Tsi-ha-lis bar!"

And Mak laughed a sinister laugh; and all laughed as they read in the fetish man's face the end of their hate. And each went his way to brood and to wait, as Indian alchemists, over such a bloody problem, can:



"Sah-waw-thah, Sah-lah-wish, dead drown!"

* * *

The native habit of the harbor was one day disturbed by gay drum-taps, merry shouts of bucks and squaws, cries of their papooses, and yelps of crazed, sycophantic curs. Driving before it the whistling, shrieking flights of the brandt, and the sawbills, the geese, and the swans, and all of that feathered paradise, came down the river a long caravan of canoes paddled by the full-pursed, returning hop-pickers, eager to inaugurate the gala of drinking and shopping always seasonable with the silver-provided red. With proper commercial taste Williams yelled a little, too, as he caught the hail of his moneyed friends. The travelers also had a silent welcomer. Medicine Mak, hidden in the forest, watched every movement on the bay.

The fetish potentate had left the village many days before. The home of the Quin-ahtsk was now roamed only by a pack of lean, well-ribbed hounds, which, unfed and forgotten for a month, with nose to shingle, scavenged every morsel their fatter days had despised. Axing the curves of some new god, or distilling from his cunning some soul-saving chant (on sale at prices to suit poor squaw or rich tyee), the ever-busy Mak had not wasted the early hours of his solitude. During the last days of his vigil before the furnace of his secret alchemy, however, Mak (even his coarse

"The young fools sucked the faucet until they lay dead as drink can make a man, measured on the floor."



"Two
canoes
sober;
one
canoe
drunk."



heart) had sickened, and the throat-tearing notes of Salish chant had again made the woods thereabout miserable for all its wild inhabitants. For seven days and nights he had danced (strange faith of a fakir in faith) to the great Che-thah-liskh. "Quin-ahtsk *hakh ahtaman!*" "Quin-ahtsk will not die!" Mak had shouted the simple prayer without rest until it became to him (persuasion of his frenzy) a new message from his god. Now as he stood gazing upon his merry fellows landing at the harbor store, Mak was as strong in his purpose as a saint bent on a charity.

The Indians camped on a point convenient for wood and water a half-mile's paddle from Williams's store toward the Tsi-ha-lis bar. The weather was gusty; taps of wind, telling that the autumn gales were due—those mighty equinoctial currents, fraught with terrific force, that begin to blow over all the coasts of the North Pacific on one and the self-same day. The white peaks and spray of the tossing bar waters could be seen from the camp.

By tricks natural to their breed, Mak's followers had met him to talk over pros and cons. Sah-waw-thah and Sah-lah-wish, he learned, had no suspicion of a plot—if they had, their suspicion was well secreted. The two were on the best of terms with the rest. The medicine man told the faithful, with fervid guttural emphasis, of the latest bulletin from his almighty: "Quin-ahtsk *hakh*

ahtaman!" and they marveled, and felt new faith in their work, even as their preceptor.

So Mak in his retreat prayed ardently for a gale, and at last Che-thah-liskh heard him. The fir tops beat the air ominously. By night the hurricane drove the surf spume before it a league over the timber. All the women had returned early to the camp, the drinking bucks alone remaining at the store.

Mak now (Satan himself going to trade) crept to the cabin, silently, as had the spy Kah-liskh. In the room was a table hewn of logs which served for counter and bar, and the whisky cask and drinking tins on it. Many of the drinkers lolled against the walls; some sat, and some sprawled at full length, on the floor; others stumbled about just as their stupid fancies prompted. A half-dozen bucks snored a deep chorus in a corner alone. The party made a hubbub which stifled even the gale. Toasts were in order. Kah-liskh looked toward Williams and held up his tin:

"Williams best white-man on coast!"

All the bucks awake drank it. Some of them grunted savagely; but none of these looked to the other—the Indian is a cunning fox in liquor. Sah-waw-thah and Sah-lah-wish also drank the toast. They were pleased as babies. "*A-a-a-a-a-ghs-ghuh!*" said they, happily.

It was getting late. One of the bucks, of those sleeping in the corner, awoke and rose on his elbows. He was a giant fellow, with massive arms. His name was Chach-ak-Chach. He seemed scarcely able to stagger to his feet, but, by hook and by crook, finally succeeded in reaching the whisky keg, against which he steadied his wabbling corpus the while he glared at the storekeeper. Some words, mixed Salish and white talk, gurgled from the Indian's throat. Williams's whisky had taken all Chach-ak-Chach's money; Chach-ak-Chach would take all Williams's whisky! What could be squarer logic than this to Indian sense? The giant turned the peg and lifted the cask bodily to his mouth. There he held it, and made as though he would drink its contents to the last drop. The helpless Williams laughed with the rest at the joke. But now Chach-ak-Chach began to treat the crowd with the keg, and Williams would have interfered. Kah-liskh, however, stepped behind the trader, and caressingly fixed a sinewy arm about his neck, chiding the white, as he half-strangled him, for a niggard.

Chach-ak-Chach, meanwhile, reached Sah-waw-thah and Sah-lah-wish. The young fools sucked the faucet until they lay dead as drink can make a man, measured on the floor. The giant, laughing at the play, now walked over to Williams, choking in Kah-liskh's merciless hold. The peg was forced into the storekeeper's mouth. He



gaspd and struggled, but surely the liquor (and, luckily for him, it was diluted) was swallowed until he, too, lay in a heap, drunk and insensate. Left without a master, the store now became the property of the Indians (whose conscience is to do exactly as they are done by), and the drunken crowd accepted every portable item on the shelves. Such rich pot-hunting as this was an event in a lifetime, and they made the best of it.

During the uproar of the general confiscation, Kah-liskh slipped out into the storm, and was met by Mak. A word was passed between them, and Kah-liskh returned to the cabin. Reeling, he burst open the door, and, in brief, deep gutturals, shouted that the canoes were adrift in the gale. To an Indian his canoe is his life. Even Sah-waw-thah and Sah-lah-wish staggered to their feet at the news. Down to the shore they all rushed in a body. The lost boats must be overtaken before they could break among the drift. No Indian, drunk or sober, fears wind or water.

The canoe of Sah-waw-thah and the canoe of Sah-lah-wish were gone. Chach-ak-Chach and Kah-liskh missed theirs. They took other craft, and started over the storm-riven water. With Chach-ak-Chach went Molak, and with Kah-liskh went Quah-laysh (some of the Indians that night had slept, and liquor they had left alone), and the young drunken tools of Williams tumbled into a canoe together.

Two canoes sober; one canoe drunk. In the roar of a gale; at the dead of night; and the mantle of fetish craft to cloak it.

From the moaning forest Medicine Mak (priest of a god, but his face branded now like a genuine thing of hell) peered over the harbor, listening. The bellowing of the elements he did not hear. To him the night was still as a summer day. Only one sound could strike on the wrought spirit of Mak. Suddenly he started.

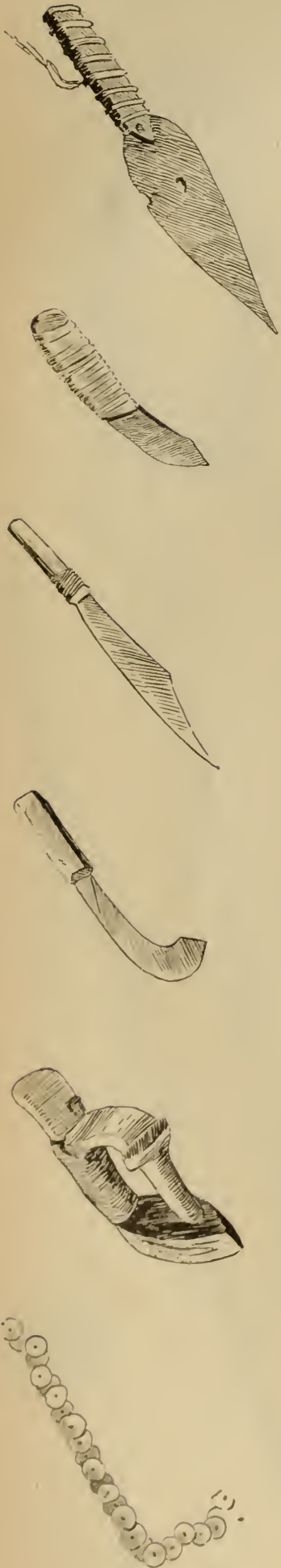
"Quin-ahtsk *hakh ahtaman!*" he muttered, softly.

He knew it was not the screech of the seagulls. He knew it was not the screams of the dying traitors. (They took the steel as a log takes the axe.) Borne on the wind to Mak were the triumphant yells of the executioners, as they buried their knives again and again in the stilling hearts of their victims. And again and again they yelled as they towed them, a grim, wild funeral procession, to the bar.

* * * * *

A couple of corpses and a canoe playing at shuttlecock on the boiling peaks where the ebb-tide was caught by the fury of the equinoctial gale:

"Sah-waw-thah, Sah-lah-wish, dead drown!"



THE SPORTING SPIRIT.

ANCIENT AND MODERN.

By George Hibbard.

UNDOUBTEDLY "there were brave men before Agamemnon," and many a one took a "flyer" with Fate—but was the spirit always the same? Did Jason, for example, set sail in quite the same spirit to seek the "golden fleece" as Drake to capture the "plate ships" and "sing the beard of the King of Spain?" To be sure, there are many instances in antiquity where it seems that the sporting spirit is the moving inspiration. There are, undoubtedly, isolated cases and expressions of it. But we must always remember that there must be sports—in which use of the word in this connection there is much significance—before there can be species.

But what is this sporting spirit? Well, there are two very well-recognized ways of determining the nature of a thing to which philosophy has given grand names. But, after all, it only amounts to this, that you make a definition for yourself, and then go hunting about to see whether the facts agree with it; or you carefully collect examples and instances in the first place, and then frame your definition from what you have discovered. Both of these are very good ways, but there is still another way by which the same end may be reached, and that is, to find out what a thing is not, and thereby learn what it is—a plan that would seem to suggest that there was something Hibernian in its origin, but which, if we are to believe history, was first tried in other lands. What is this sporting spirit *not*? Perhaps the best illustrations of such negative characteristics are most easily to be found by turning to the "Iliad," and particularly to the "Achilleid," that part dealing with the "wrath of Achilles," which some have supposed to be a distinct poem by itself. Wherefore is this "wrath of Achilles," and what result does it have? As we know, it arose from the fact that Briseis was taken from him—enough, certainly, to arouse the ire of any hero—but what was his subsequent conduct? Why, he "sulks in his tents," and supplies mankind ever afterward with an il-

lustration of petulant contumacy, checking the action of the Greek hosts and making all advance impossible. He might be very much cut up about the matter, but since he had gone into the venture—and these words might be very well underlined—it was fitting that he should forget his own injuries, carry the affair through whatever he did afterward, play the game out, do his best to the bitter end.

Play the game out! There it is—play it out. Do not give up because things go awry, but try to set them right, for that is not only the more dignified course, but the true way of the sporting spirit. The man who "sulks" is false to others and false to himself, and the sporting spirit forbids all falsity and weakness.

In the Franco-Prussian war, how many of the members of the old families of France who had a grudge against the government did not sulk? On the contrary, when the Emperor of the French declared war upon the King of Prussia, so soon to become an emperor in his turn, how many sprang forward to take part in the strife? and when, with the great catastrophe of Sedan, the tragedy or farce was brought to an end, how many were lying dead in the fields about that city of the Ardennes in the old country of Champagne, and how many went into captivity in the land of the enemy?

There is, as we know, a legend, though it is not strictly Homeric, about Achilles that throws a clear light upon a part of this question. It is told that his mother, wishing to insure his safety, dipped him in the Styx, thereby rendering all but his heel invulnerable. In truth, it must have been easy to be a hero and ready for any adventure with such an advantage. Who would not fight any number of Trojans, or anything else, if he knew that he could not be hurt? But, it is again the way that the fact was considered by the Greek mind, and not the fact itself, that counts; for even if there really was an Achilles, of course, he could not have been rendered invulnerable by any process whatsoever, any more than any of the heroes

of antiquity could be made unconquerable by the possession of any sacred armor, or the paladins of later centuries invincible by the possession of any magic words or horns. It is merely the fact that the employment of such things was considered justifiable and sporting that is significant.

Mankind had too recently escaped from the period of fear and comparative insignificance, when any means that would insure safety were eagerly seized, and had held for too short a time his more secure position, to think of picking and choosing as to his means of defense and attack. Even the Knights of the Round Table lived in very primitive days, and it is not wonderful that, with their belief in unnatural adversaries—in giants, and dragons, and hobgoblins of every sort—they were ready to have recourse to unnatural weapons.

With such terrors it is only to be expected that any means of protection should have been sought, and certainly it was hardly with the joyous confidence and exhilaration of the sporting spirit that the knight-errant started on his search for the Holy Grail, but with much more of the feelings of a cat crossing a street. Indeed, the sporting spirit could not exist when a man took a charm with him, very much as nowadays a person who is going to a malarious coast takes a supply of quinine. No, there was little of the spirit in the champion who was insured against dangers and mishaps more effectually than by any "accident policy," and even the possession of "Excalibur" itself bars Arthur from the right to be ranked as one imbued with the spirit of true sport. The object was not to make a fair fight and let the better man win, but, from fear of the result, to insure winning at any hazard.

A fair fight! There it is, and in it is the solution of the crux of the whole matter. The chances must be equal, and then, and then only, all may be done for victory. This great principle runs through the requirements of all the range of sport. Yes, there must not only be fair play, but the desire to promote fair play when the sporting spirit is really to exist, and such a feeling has only generally been accepted as a governing principle within recent times.

But there is still one other thing which, though not so important, is still a not in-

significant element in the right feeling about the matter, and that is the willingness to encounter any odds—to go into any venture where there is a fighting chance. It is not necessary to place Achilles in the dock or on the witness stand—though much might be learned by his arraignment in the one and his examination in the other—still there is one incident in his career that illustrates very well a final requirement. It is stated that after he had killed Hector, he tied the body to his chariot, and, dragging it round the walls of Troy, carried it to the ships, where he proceeded to sacrifice twelve young Trojan captives. Now, courtesy to a worthy adversary after a victory is esteemed one of the essentials of the true sporting spirit, and of this quality in the past there was a sad deficiency; though, to be sure, there are to be found several separate exceptions, as, for example, the treatment of Porus by Alexander, who, indeed, was always singularly modern.

In short, as a whole—as a systematized code embodying rules for general conduct—the sporting spirit can only be found within fairly modern times. A proof of this, and a conclusive one, is the fact that the duel as it existed in later generations was utterly unknown to antiquity. It may seem strange, but it is probably true, that the troubadours had more to do with the appearance of this new element in modern life than almost any other influence. They systematized and inculcated the rules of the game of war, and love, and sport, in the leisure of those Provençal castles, and mankind, more than is recognized, has in many things lived according to their dictates. But the more perfect development of the spirit came even later, and it is undoubtedly with the request, amid the din and smoke of Fontenoy, "Will the gentlemen of the Guard fire first?" that we hear its first full utterance and find its first general acceptance.

But since that time the sporting spirit has grown apace, and not only spread, including under its sway more kinds and classes, but has permeated and struck deeper into the hearts of those who already felt its influence. For there is something in man, inherited, or perhaps inherent, that inclines him to sympathy with the sporting spirit wherever found, and, almost in spite of himself, forces him to extend to it his shamefaced approval.

There is something in this spirit, with its lack of calculation and abundance of slapdash chancing of things, that inevitably appeals to him—probably because there is something refreshing in such a loosening of the bonds of circumstances and of relief in thus throwing the reins on the neck of Fate. Anyway, it is more or less from the degrees in which the characters of history or fiction possess this quality that mankind gives them interest and affection.

One of the reasons why the world has always looked askance at the first Napoleon is because, with all his glory, with all his genius, he was emphatically not a sportsman. Napoleon was a "pot-hunter," which the dictionary, with a parenthetical warning that the expression is "slang," defines as "a sportsman who shoots anything he comes across, having more regard to filling his bag than to the rules which regulate the sport." If Napoleon had possessed the sporting spirit, instead of remaining the "ogre" that years of removed misconceptions have left him, he would have been one of the favorites of the world's story. Even the unsympathetic Wellington had more of it, and there was the feeling of true sport in what he said in the Peninsula: "Napoleon's marshals plan their campaigns as if nothing were to go wrong. Now, when anything breaks down, I knot up the harness and go on."

"Knot up the harness and go on!" There is the true sporting spirit. It is, moreover, owing to the fact that Nelson possessed the spirit of sport to perfection that he has taken the prominent place that he has in the Napoleonic drama, for there was something of the freedom and sweep of his own seas in what he did that has always appealed to the imagination.

Thus we see that the sporting spirit may modify our conceptions of the past and affect, very actively, our opinions of other men and things; still, however much it may do this, its existence would be of comparative unimportance if it were not for the powerful influence in the present—not only in the conduct of our lives, but, incidentally, from the many indirect results springing from the prominence to which it has attained. And it is particularly in this latter-day America that it is of such consequence, for here, in a way, it is almost a new fact, if not a new factor.

It is not alone that more time and thought is given to sport, but with this changed life has come a changed ideal. The young man, for example, of the middle of the nineteenth century was a very different person from the youth of its latter days; and if the masculine manifestations of this changed spirit are not enough to do away with all doubt as to the existence of new conditions, it is only necessary to instance the attitude of womankind to convince the most incredulous. One does not have to consider the lives of the grandmothers, but to remember the changes that only a few years have made in what is considered becoming and fitting for matron and maid. And, moreover, it must not be forgotten that in the inculcation of womankind with the sporting spirit there is in itself a tremendous revolution—that, indeed, this is one of the elements of the change that makes it seem as if the question of the day is to be, whether the burden of the world is to be borne by caryatides instead of atlantes, the end of which is not yet.

If, therefore, sport and the sporting spirit have changed the lives of young men and maidens, and not only of these, but of the middle-aged as well—as who that looks upon any golf course can deny?—why, this is something to be recognized and considered, for it is not only making a new physical America, but making a new mental one as well, and in regard to many a "live question" and vital issue it is creating or influencing our opinion.

The war with Spain was unlike almost all other wars in history, in that it was the war of a whole people; and unlike other wars in that, where almost all others have divided, this has united. It now may be admitted this was a "sporting" war. And in the answers to the questions that have been left—the questions of imperialism and expansion—the sporting spirit in these days is having a great deal to say, for there is a great deal of the spirit of sport in the spirit of Jingoism.

But however this may be, it is not alone with national questions or with public questions that the sporting spirit concerns itself, but it enters into the very texture of our being, and is every day affecting our behavior one toward the other and directing our conduct in the ordinary incidents of life. The sporting spirit has entered into business, and not only has made

the commercial world something of an arena, but has also imposed on the contestants a set of rules for their government.

There are certain things that are fair and certain things that are not fair—dodges that are admissible and others that bar at once the one who practices them—and it is singular how similar these rules are to the general rules governing sport. But even in the very minor incidents of life these rules form precedents by which we are instinctively guided. In friendship and even in love, though these rules may not be remembered, they are often unconsciously followed. And this must be so, for, looked at in another light, in its best sense, the sporting spirit is but an offshoot of the great spirit of Honor, and derives much of its power from its origin and much of its influence from its association. It may be described as a province of the Kingdom of Honor which has only recently been brought forward, whose resources have only recently been developed; nor can we believe that this region has been wholly "opened up," that all the hidden veins of ore have begun to be worked.

So to the scoffers who say that sport has no use and the sporting spirit is not of service, but rather works harm—to those it may be said at least that no one can be worse for following its dictates. The sporting spirit comes from the North, and not from the stealthy Orient or the murderous South; and if our Aryan ancestors possessed it, then indeed it was merely as a potentiality that was only acquired by those who migrated first to the North and was developed in their fierce sporting struggle with nature. It was in the spirit of the berserker and the viking, and was the moving spirit of many an adventure and invasion, turning the eyes of those wild warriors to the South and pointing the prows of the shield-hung ships of those hardy sailors ever seaward. There is something healthy and inspiring about this spirit, even like a bracing wind.

For what does it teach? Primarily, that we must not "sulk"—that, no matter what others or Fate may do, we must do our best, ever hoping for the best and doing all in our power to attain it; that we must "play fair"; that it is cowardly to

take an undue advantage; and if by any chance it falls to us, if it is not in accordance with the rules of the game, that it is courtesy and courage to waive it and yield it up, trusting to our own merits to conquer, and disdaining to take anything except our just dues. Moreover, that we must not be appalled by any odds, but, remembering Danton's injunction, take it for our motto, since Fate likes often to yield to the surprise of a bold assault, or may even be browbeaten by a brave appearance. And, in addition, we have found that any excess of exultation is not only an exhibition of bad taste, but of weakness; and, remembering how we should have hoped to be treated if the fortune of war had gone against us, we must endeavor to show consideration to those whom we have overcome, thereby bringing to mind a rule that may not be mentioned here.

Remembering these things will not hurt any one, certainly, and may even be helpful, and so, as has been said, the sporting spirit can do no harm. And, after all, is there not a chance of its doing a fair amount of good? The things that it inculcates will carry any one a good way in ordering his life; and if the sporting spirit is not an all-sufficient guide, at least it is a very good guide-post; if not capable of directing our steps on all occasions, at least giving the right direction at some very critical turnings. Perhaps it is best to admit that it does not by itself supply an all-sufficient code, but it may be granted without fear that as a supplement and addendum to something better it adds much and increases our knowledge in many different directions. And since this is so, let it rather be a matter of congratulation that this spirit is increasing, for—nothing is said about healthy bodies—it makes healthier minds, or, at least, minds more ready to embrace the generous line of conduct rather than the ungenerous, to seek for fair play rather than its opposite, and be daring when daring may serve.

These may be commonplaces, but it is in the fact that they have come to be commonplaces that the reason for felicitation lies; and if it is the spirit of sport that has in any degree diffused and generalized these principles and made them more common property, then the sporting spirit has done a great deal, and may do still more.

ALPINE ACCIDENTS.

A LESSON IN POSSIBLE DANGERS.

By Francis Gribble.

ACCORDING to the experts, Alpine accidents ought never to happen, because rules have been laid down for avoiding them. This is true, just as it would be true to say that if a chess-



On an Ice Slope.

player never made a bad move, he would never lose a game. But bad moves are made in the mountains no less than on the chess-board. Every season brings some casualties, and experts are often among the sufferers. Even Sir William Martin Conway—most cautious of climbers—has described to me how he once fell off a rock as high as the Dewey arch in New York; and Mattias Zürrbruggen—most illustrious of guides—once kept his footing by main strength on a narrow ledge, while holding up a man who was roped to him, swinging to and fro on the face of a precipice of 6,000 feet, and

the rope nearly cut through by jagged rocks.

On the whole, Alpine accidents are very real things. They mainly happen (1) when the climber falls off the mountains; (2) when the mountain, or some portion of it, falls on the climber; (3) when the climber loses his way or is weather-bound.

The simple fall, of course, is mainly an incident of rock-climbing. It is particularly frequent in the Dolomites, where many of the peaks that are ascended look rather more difficult to climb than prison walls. Sometimes it happens because foothold or handhold which seems secure gives way beneath the climber's weight, as was the case in the last terrible accident on the Dent Blanche. More often, perhaps, it happens because the climber has overtired himself. At a critical moment some muscle fails to answer to the call, and the climber slips. Sometimes his companions are able to check his fall and hold him up, as Zürrbruggen held up Mr. FitzGerald on the New Zealand Mountain. Or it may be that the impetus of his fall carries them to their death with him.

The classical example of this sort of accident is the famous accident to Mr. Whymper's party on the Matterhorn. It is an old and well-known story, but one may venture to repeat it in the briefest possible outline.

It happened on the way down, at the point where the angle of inclination alters, and the mountain suddenly becomes steeper, so that the leaders of the party were hidden from those above them. Michel Croz, the guide, was in front. Then followed Mr. Hadow, the Rev. Charles Hudson, Lord Francis Douglas, the old and young Tangwalder, and Mr. Whymper himself. The lame duck of the party was Mr. Hadow. He was tired out and could hardly move. Croz was obliged to keep close to him, in order to join his feet into the proper footholds. He slipped, fell against Croz, and knocked him, too, from his foothold. Croz fell ten or twelve

feet through the air, and then the shock came. Instantly Hudson and Lord Francis Douglas were dragged from their places, and the weight of the four falling men came upon the other three, who planted themselves firmly, and clung to the rocks, the jerk coming on them as on one man. Even then, nothing could have saved them if the rope had held. But the rope broke, and its parted strands separated the living and the dead. There were four dead bodies on the glacier, 4,000 feet below, and three terror-stricken men clinging to the Matterhorn crags.

Similar falls have taken place sometimes on narrow arêtes—knife edges of rock or ice resembling the sloping roofs

He leaped over the arête on the opposite side to that on which Lord Francis Douglas had fallen. The two men balanced each other as they lay slung across the ridge by the rope; they had not let go of their ice-axes, and were presently able to scramble up onto it again. Other guides have been known to do the same thing, on the arête of Monte Rosa, and on certain arêtes in the Engadine. It is the only thing to be done under the circumstances; but it is not easy while sitting at home to realize how much presence of mind is needed to do it.

Another, and not an infrequent, way of falling off a mountain is to tread upon a cornice. Perhaps this needs explaining.

A cornice, then, is a mass of snow which, owing to the combined influence of wind and frost, projects over a precipice or an ice-slope. You can see the cornice when it overhangs you, and realize that it might break away and fall on you at any moment; but when you are on the top of the ridge there is very often nothing to indicate the presence of the cornice, and it is quite easy to walk on top of it without knowing that you are doing so. It may bear your weight. One of the first parties that ever climbed a snow-peak—De Luc's party on the Buet, in 1770—lit a fire and boiled a kettle on a cornice, without the least idea that they were taking any undue risk. But sometimes the cornice breaks under your weight, and then you fall to the bottom of the precipice, or slither to the bottom of the slope. The Lyskamm is the typical mountain on which such accidents occur. There have been notable accidents of the kind in 1869, in 1877, and in 1896; they resemble each other in almost every detail, though in the first case only one man perished, because the others were not roped to him.

Turning to the second group of accidents—the cases in which the accident occurs because something has fallen upon the climber—we have to do with avalanches. There are avalanches of snow, of ice, and of rock; but the snow avalanches are the more frequent and the most important.

What happens, in a general way, in the case of a snow avalanche, is this: Snow



Where Mr. Whymper Fell on the Matterhorn.

of high rows of houses. Lord Francis Douglas, before his death on the Matterhorn, had fallen off such an arête on the dangerous Ober-Gabelhorn. Happily, his guide, seeing him fall, did the only thing possible to save both their lives.

falls—chiefly in winter, but also at other seasons of the year—in great quantities, in places where it has no great security of tenure. Something or other—usually the heat of the summer sun—causes it to break loose from the place where it is lying and come sliding down the hill. A large avalanche will destroy forests and bury villages; the smallest avalanche is quite enough to knock over a climber and send him spinning.

In theory a climber is in no danger whatever from avalanches; he is supposed to observe where they are liable to fall, and to avoid such places, or to arrange his climb so as to get past them before the sun touches the snow. In practice he often has to take a certain risk. The way up Monte Rosa on the Italian side, for example, lies almost entirely in the track of avalanches. Canon Girdlestone, of Oxford, relates how he once sat down to lunch in the track of such an avalanche, and had only just time to scurry out of the way before it whizzed past; and that great climber, Mr. Tuckett, once had a race with an avalanche on the Eiger Glacier.

It was in 1871—as bad a season as climbers remember in the Alps—and Mr. Tuckett, two friends and two guides, without the least thought of courting peril, were ascending the Eiger Glacier, on the side nearest to the Rothstock rocks. The glacier sloped more or less steeply, and the climbers were near the bottom of it. In front of them, high up above them, was the ice-fall, the place where the glacier poured, as it were, over a precipice, and was broken into fragments as a waterfall is broken into foam. Above the ice-fall, pressing against it, and kept by it in its place, was a vast mass of hundreds of thousands of tons of loose, freshly fallen snow. Of a sudden, the climbers heard a noise like a thunderbolt, and saw that the ice-fall had given way beneath the pressure, and that snow

and ice were sliding down the slope toward them, threatening to overwhelm them. Their only chance was to reach the rocks by the side of the glacier before it overtook them, and in order to get to the rocks they had to struggle through



The Snow Fields of Mont Blanc Where Travelers Lose Their Way.

knee-deep snow. It was a race for life.

"I remember," said Mr. Tuckett, "being struck with the idea that it seemed as if sure of its prey, and wished to play with us for a while; at one moment letting us imagine that we had gained upon it and were getting beyond the line of its fire, and the next, with mere wantonness of vindictive power, suddenly rolling out its right, a vast volume of grinding blocks and whirling snow, as though to show that it could outflank us at any moment if it chose.

"Nearer and nearer it came, its front like a mighty wave about to break. Now it has traversed the whole width of the glacier above us, taking a somewhat diagonal direction; and now—run, oh! run if ever you did, for here it comes straight at us, swift, deadly, and implacable! The next instant we saw no more; a wild confusion of whirling snow and fragments of ice—a frozen cloud—swept over us, entirely concealing us from one another, and still we were untouched—at least I knew that I was—and still we ran. Another half second and the mist passed,

and there lay the body of the monster, whose head was still careering away at lightning speed far below us, motionless, rigid, and harmless."

This is one kind of avalanche accident. Another and more common kind is when the climbers themselves start the avalanche. They are traversing a slope of ice on which a certain amount of fresh snow has fallen; their footsteps loosen the snow and set it sliding. It trips them up and carries them down with it. The slide ends in a crevasse; the danger is that they will fall into it, and that the snow will follow them and bury them alive. Yet there are men who have been carried away by such avalanches and escaped alive. The most famous man who underwent such an experience was the late Professor Tyndall.

It happened on the Piz Morteratsch, in the Engadine, in 1864. The professor, with two friends, Mr. Hutchinson and Mr. Lee Warner, and two guides named Jenni and Walter, had occasion to cross a gully filled with hard ice coated with new snow. The slope led straight down onto a glacier with yawning crevasses in it. Jenni, who was a very famous guide, ought to have known better than to venture in that gully. He had not led his party very far onto it, when he realized the danger and warned the others to tread gingerly, as "a false step here might start an avalanche."

"The word," says Professor Tyndall, "was scarcely uttered when I heard the sound of a fall behind me; then a rush, and in a moment my two friends and their guide, all apparently entangled together, whirled past me. I suddenly planted myself to resist their shock; but, in an instant, I was in their wake, for their impetus was irresistible. A moment afterwards Jenni was whirled away, and thus, in the twinkling of an eye, all five of us found ourselves riding downwards with uncontrollable speed on the back of an avalanche which a single slip had originated."

There was nothing to clutch at—no means of arresting the descent. They tried to put on the brake by grinding the points of their alpenstocks into the ice, without the least result. In a sense, as it turned out, their very speed was their salvation. It caused them to shoot over the gaping crevasses into which they would

have tumbled helpless if they had been going at a slower rate. But there were other crevasses lower down. Could they stop themselves before reaching these? It was just a chance, and the chance happened to be in their favor.

"We came to rest so near the brow that two or three seconds of our average motion of descent must have carried us over. Had this occurred, we should have fallen into the chasms, and been covered up by the tail of the avalanche. Hutchinson emerged from the snow with his forehead bleeding; Jenni had a bit of flesh removed from his hand by collision against a stone." . . . No one, however, was seriously hurt, though the professor found that he had lost his watch.

This is, perhaps, the most normal type of avalanche accidents. An accident similar in almost every detail, except that the snow was deeper and two of the party—M. Boissonnet and Tyndall's guide, Bennen—were smothered in it, occurred in the same year on the Haut de Cry. There have been plenty of others, not all of which have been recorded in the Alpine journals. In one case within my knowledge which has never been written about, the climbers were saved by the remarkable presence of mind of their guides.

They were in an ice gully with snow on it, very like Professor Tyndall's gully. Fortunately for them, the slope was not very steep, and the snow was not very thick; but they started the avalanche in the very act of stepping from the ice onto the rocks, and duly began to slither. The two amateurs were sprawling, but the guides, happily with their feet and their ice-axes, though they could not stop themselves, could, to a certain extent, steer their course; and they steered straight for some black rocks that they happened to see protruding through the ice below them. One of the guides passed the rocks on one side, the other on the other side: the amateurs collided with the rocks. They were horribly bruised, but no bones were broken. Thanks to the rope fastening them together, the rocks stopped their fall, and in due course they cut their way up into a place of safety.

Plenty of stories might also be told about ice avalanches and falling stones—climbers are much more afraid of falling stones than of snow avalanches—but ad-

ventures with falling stones are more exciting to experience than to read about. What happens, as a rule, is that lumps of rock are frozen on to the surface of an ice *couloir* up which you have to cut your way. When the sun gets at the ice, their connection with it is severed, and they come bowling down the slope in your direction. As you can only stand in the steps that have been cut for you, your facilities for dodging are not great; and even a pebble of small size hits hard when it has had a few hundred feet in which to gather velocity.

which are due to blizzards. Mont Blanc has been the principal scene of these, for on that the distances are great, the snow fields are wide, and the chance of losing your way is good. You may scoop yourself a sort of shelter in the snow, and wait; but you may freeze to death while you are waiting. This was what happened only a few years ago to Professor Nettleship, of Oxford, though the weather lifted in time for the other members of the party to be saved. A still graver case occurred in 1870, when a party of three American travelers, with eight guides,



Where Mr. Tuckett Raced the Avalanche on the Eiger Glacier.

There remain the Alpine accidents which are attributed to the weather. A good guide generally avoids these, because he foresees bad weather and declines to start. "It goes," said a certain sanguine amateur on one occasion to the eminent Melchior Anderegg, pointing up at a little temporary, deceptive sunshine. "Oh, yes, it goes; but I go not," was Melchior's judicious answer.

Thunder-storms account for a good many of them. Mr. Cecil Slingsby was once caught in a thunder-storm at the top of the Dent Blanche. One of the party was struck by the lightning, which was attracted by the metal on his ice-axe. Luckily, he was only dazed and not killed by it.

Finally, there are the weather accidents

all perished together in this manner. One of them—Mr. T. Beane—had scribbled a fragmentary diary of his experience, which was subsequently found lying beside him. We may end this article by quoting its concluding words:

"September 7th (evening).—We have been on Mont Blanc for two days in a terrible snow-storm; we have lost our way and are in a hole scooped out of the snow, at a height of 15,000 feet; I have no hope of descending. Perhaps this book may be found and forwarded. . . . We have no food; my feet are already frozen, and I am exhausted; I have only strength to write a few words. I die in the faith of Jesus Christ, with affectionate thoughts of my family. My remembrance to all. I trust we may meet in heaven."

A HAND-TO-HAND BATTLE WITH A LIONESS.

THE TRUE STORY OF A BOER HUNTER.

By A. S. Jennings,

Prospecting Engineer, De Beers Mining Company, South Africa, 1891 to 1899.

I HAD spent the three summer months of November, December, and January in the Moremi country, prospecting along the south banks of Lake Ngami, or "Nghabe," as the Moremis call it. Although I found a small amount of friable ore among the picturesque range of hills known as the Quebe Koppies, the expedition proved a decided failure, and it was with feelings of disappointment, mingled with disgust, that I at last gave orders to pack camp and strike for the Segana River, which I intended to follow to its confluence with the Zouga, and along the latter to Lake Kumadua.

At the end of January we arrived in sight of the kraal of that prince of hunters (and entertainers), in south-central Africa, Van Stremboom, whose small ranch and trading-post has furnished hospitality to wandering hunters and prospectors for nearly a score of years. When we reached the kraal, we were met by the old Dutchman's Matabele tracker, Suntag, who informed us his master had been confined to his bed for nearly a month past, as the result of injuries inflicted by a wounded lioness.

Hastening into the hut, I found the old fellow lying upon a kind of bunk at one end of the room: his face and arms covered with partly healed scars.

Stremboom is a striking fellow, several inches above six feet in height, and, notwithstanding his fifty-odd years, when well, as lithe and active as a panther. He essayed to rise as I entered, but when he had nearly reached his feet, the effort proved too much, and he sank back among the pile of skins, extending his left hand (the right hung helplessly at his side) in my direction.

"Well, well, Brother Jennig!" (Stremboom speaks English quite fluently) "what has brought you to old Van's kraal again? Is it to kill another rhino?" (referring to an episode which occurred several years previously).

"Well—hardly," I replied, grasping the outstretched hand. "Judging from appear-

ances, I should, as far as your company goes, have to take such a hunt alone just at present. And so at last you met your match, eh? and a lioness, too, at that! I would—"

"Not a lioness, Brother Jennig, but a devil. Yes, a regular *devil*, without the hoofs and horns, but with an extra set of teeth and claws, to make it up; at least, it seemed to me she had 'em. But sit down, and I will tell you how it happened."

When I had seated myself, the old fellow raised himself, with difficulty, to a sitting posture, and, after gazing thoughtfully through the open doorway for a moment, began his story, speaking slowly and with apparent difficulty.

"It is more than a month ago; just before the beginning of the rainy season. I left the kraal early in the morning to look for buffalo, with Suntag and two of my best dogs. I had my single-barrel eight-bore rifle, but I only took three balls, as my supply of them was getting low, and I did not expect to be gone long, only wanting a young bull for meat. We went toward the river, and when we had entered the thick bush the dogs took a scent and went rushing off, while we followed as fast as we could. I expected they were after either a buffalo or an oryx, as they were both trained not to chase small game, and was listening every minute for the baying which would tell me they had brought the game to a standstill, when I was startled to hear one of them give a yelp of death agony. Hurrying on, we soon came upon the body of the smaller of the two, badly torn and gashed, and a moment later heard the other dog give his death yell. When we came near the spot, we looked about for a minute, but could see nothing, and I was about to press on, when suddenly my Matabele shouted '*Ka dig! ka dig!*' and began to make tracks for the brush. At the same instant I discerned the form of a gray-throated old lioness, the largest I ever saw, lying at the edge of a thick growth of bushes, her paws

across my dog's body. She crouched low when she saw me, looking very wicked.

"Ah, you thief!" I cried. "So it was you that killed my fine dogs, was it? Oh, you don't need to look savage; you can't scare Van Stremboom. You have killed my dogs, you old she-devil, and I will kill you."

"At that she looked even more wicked, drawing back her ears and giving a kind of snarling whine, just as though she understood what I had said, and was warning me to go slow. Taking a careful aim at her neck, I fired, and with a screech she sprang away into the thicket, where she roared terribly.

"After I had reloaded my gun, the Matabele begged me to leave, as the lioness must soon die from the wound I had given her. The bullet, as I had noted from where I stood after the shot, had entered in front of the shoulder and passed out behind the opposite flank.

"The Matabele's advice was good, and I followed it; but we had not gone far when he caught my arm warningly, and, pointing ahead, whispered, 'There she is again, master!'

"Sure enough, there she was, the devil, lying in the path some sixty yards off! I was inwardly glad; for I did not like to leave her behind after she had killed my dogs, and it seemed as though she was challenging me for turning away from her at first. She was lying as flat as a snake on the ground, and I could only see the top of her head and back.

"I stepped a few paces nearer, and then fired at her head, but made a bad shot, the bullet piercing her ear, but not touching the skull. For a wonder, she did not charge, but lay growling loudly in the grass, while I loaded the gun with my last ball. Taking a careful aim between the eyes, I fired again, but my luck seemed to be gone, for the bullet only cut a ridge down her back—and then she came!

"I started to club my rifle, but the next thing I knew I was flying through the air, and landed, half stunned, on my stomach. When I came to, the lion was standing over me, with her claws in my shoulder" (here he pulled away the flannel from his right shoulder to show the wound), "and so I lay still and thought what I should best do. I was sure that she would soon try to strangle me, and that if I wanted to save myself at all (and I didn't feel

very hopeful) I must try to wrestle with her.

"I jerked myself round, and when she saw my face she tried to bite my throat, but I put my right arm in her mouth, and she bit that through and through. Then I thought of my knife under me in its sheath, and I beat her with my left hand until she dropped my right arm and seized the other. With my right hand I felt for the knife, but I could not grasp it, for the sinews of my right thumb were lacerated. Then I thought to put the powder flask in her mouth, and when I did so she bit it full of holes, as you can see"—pointing to it hanging on the wall—"and all the time I could hardly breathe, for her claws were fastened in my chest—and a lion is heavy! I realized I was rapidly suffocating, and that I would soon be unconscious if something did not happen quickly to relieve me.

"In biting my arm, she kind of 'wooled' me over on my side, and I saw my knife lying on the ground. I seized it with my left hand, and, maddened with pain, plunged it into her eye. When she drew back for an instant, I rose on one knee, but she quickly threw me down. Exerting all my strength, I rose again on both knees, holding her by the shoulders, and ducking my head against her neck so that she could not bite me.

"Although she was clawing my arms and side, I could feel she was getting weaker. Suddenly my brain grew like fire, and, nerved with rage and frenzy, I grappled the brute, threw her, and buried my fingers in her throat. She was by this time very weak from the first wound I had given her, or I could not have thrown her.

"From then on my memory is confused. I can recall nothing definite as to how the fight ended. The next I remember was when I woke up on this pile of skins, with an English missionary, who had been staying with me for a week or more past, bending over me, and tying up my wounds, while the Matabele stood in the doorway, his eyes all whites, with no pupils.

"From what they tell me, it seems that the lioness presently, probably presuming I was dead, made tracks for the brush. When she had done so, the Matabele, who had been watching from a nearby tree, came down and carried me to the kraal.

"But that was not all," added Strem-

boom, noting my expression of intense interest, "for the very next day my son, who lives forty miles up the Segana, arrived here, and as soon as he learned of the encounter he started out to settle accounts with the lioness.

"The dogs struck her spoor a short distance from where she had killed the other two, and soon had her at bay. But although the boy put no less than four eight-bore balls in her hide, she not only managed to get away, but killed two of the three dogs, wounding the third so badly they had to shoot it afterwards."

"Rather an unusual beast," I remarked, as the old fellow sank back, exhausted, on the couch. "I suppose she is surely done for now, though; a lioness never lived that could carry for very long wounds made by six eight-bore balls through the body."

"That's the queerest part of it; she is not only alive, but is very much alive, and has made two raids on my flocks of goats since, killing seven in all. My boys (Matabeles) saw her each time, but were afraid to fire at her. She does not venture out in the light of day, however, but comes at dusk, and is as cautious and crafty as a tiger."

"I suppose you will have no objection to my trying my hand at her?" I asked, thinking that perhaps the old hunter was anxious to settle the account himself as soon as he was able.

"Not in the least, my boy. But remember — *take no chances with the devil!* When you meet up with her, think of old Van," and he smiled at me pathetically.

I had intended to remain over with the old Dutchman for a day or two, and so made preparations for a lion hunt on the following day. Early the next morning I started out, accompanied by my Zulu hunter and guide, Ulani, and a half-dozen Matabeles. Although we spent the entire day in the search, and the day following as well, we saw no sign of our quarry, and I began to think the beast had either died of her wounds or had left the neighborhood. On the evening of the third day one of the Matabeles rushed into my tent with the startling information that he had seen the lioness at the river bank, not more than a thousand yards from the kraal, and from his cover in the bushes had watched her take her evening drink.

All was excitement in an instant, and a

kind of "council of war" was held in Stremboom's hut, when it was decided not to molest her until the following evening, when Ulani and I would post ourselves in one of the trees along the river bank.

On the following evening, a half-hour or more before sunset, the Zulu and I repaired to the bank of the river, and after a careful examination of the tracks in the soft sand, finally selected a tree, into which we climbed to a height of perhaps twenty feet, reaching a place where two large limbs extended from the trunk on either side. The tree was rather bare, and so the Zulu broke some branches from a bush and wove them in front of us, making our concealment more perfect, although even then it would have been an easy matter for the beast to have seen us, had it glanced in our direction. As a rule, however, these animals do not look up, unless their attention is attracted.

By degrees the sun sank beneath the horizon, and the heat diminished somewhat, although, as there was not the slightest breeze, the air continued fairly stifling. Doves of jungle fowl were winging their way toward the river, to take their evening's drink and bath, and their loud, complaining cries sounded weird and startling through the otherwise silent jungles. A spotted doe emerged from one of the jungle paths and moved along as unconcerned as though such animals as lions, leopards, and panthers were not in existence. This unconsciousness of impending danger seems to be in the line of a wise provision of nature—a case of "blissful ignorance," as it were, of the fact that the beasts of prey use the same paths through the jungle, and that a lion and its victim may meet face to face at any moment.

On excessively hot days lions do not move until just after sunset, and we were now on the eve of expectation, straining our eyes and ears to catch the first sign of the game. Presently I thought I heard a light, humming sound in the bushes to our right, like the buzzing of a large bee. It lasted a few seconds only, but after a minute was repeated, this time nearer and more pronounced. The Zulu touched my arm, and then pointed toward the sound, with a significant nod. It was the low, purring call of a lioness!

The light was now failing rapidly, and I was in a state of uncertainty as to

whether it would be possible for me to make a sure shot when she appeared. After a few minutes' silence she again began the low, purring call, and this time it sounded farther away. Alas! I thought; she has winded us and changed her course. I had about given up all hope, when I made out a shadowy form at the edge of the jungle, in almost the exact spot occupied by the doe a few minutes before. She was standing with her head turned away from us, gazing half-lazily, half-suspiciously about, and lashing her sides with her tail, to keep off the gnats. She was standing about twenty yards distant from us in the foot-path, at the edge of a line of heavy bushes.

I took advantage of her head being turned away to raise my rifle, Ulani following my example. It was so dark I could not see the sights, and so ran my hand along the barrel, pointing my finger at her exposed shoulder, and, after a mo-

ment's hesitation, pressed the trigger. Our shots rang out simultaneously, starting the silent jungle into life, and were followed by an angry screech from the lioness. For a few seconds the smoke completely hid her from view, although we could hear her thrashing about in the bushes. For several minutes the sound of breaking and crushing underbrush continued, and then all became quiet. After a little we descended to the ground and returned to the kraal, where I found Stremboom in a state of feverish anxiety.

On the following morning we repaired to the scene of the one-sided conflict, expecting to find the lioness stretched out among the bushes. But we were doomed to disappointment, for, instead, we found her spoor leading toward the dense jungles which line the south bank of the Segana for miles, while the small amount of blood on the bushes indicated she was not badly hurt, after all.

NORTH AMERICAN GAME-BIRDS:

THEIR POPULAR BUT INCORRECT NAMES.

By D. G. Elliot.

THERE would at first blush seem to be very little in the title of this article of interest to the general reader, or even to the sportsman, for classification smacks of science, or of some mysterious thing with which the expert is alone fitted to deal. Yet for non-scientific persons there is a homely usefulness, if I may so term it, in acquiring a knowledge which enables them to distinguish the different characteristics of the animals and birds with the general appearance of which they are familiar, and to call them by their right names.

In the United States it is not seldom that one hears of some sportsman going pheasant or quail shooting, when, as a matter of fact, there never was a quail or pheasant indigenous to North America. There are partridges and grouse in this western world, but no quail or pheasant. Of course, since, in various parts of the land, the last-named game-bird has been introduced, and, in some localities, has

increased greatly, one may in such places very properly say he is going pheasant shooting; but if he has regard to the eternal fitness of things he may never say he is going quail shooting, for no such bird is found on the North American continent. I believe I have heard that at one time some English partridges and migratory quail had been imported and turned out in some of the States, but I have learned nothing of them since, and for all practical purposes they are as if they had never been.

Now, why is it not correct to speak of quail or pheasant shooting in North America, and what are the characters that distinguish quail from partridges, grouse from ptarmigan, and pheasants from them all? The chief offenses against popular nomenclature are committed with the Rasores, or scraping game-birds, those that scratch the ground when seeking food or taking a dust-bath. Geese and ducks are simply ducks and geese all the

world over, and although other birds, like the Gannet, have been dubbed "a goose" (and the name would be more aptly borne by the one who gave it than the bird itself), yet the ordinary observer would likely know a goose when he saw it and call it by its lawful name. Such is evidently not the case with the "scraping" birds. They are frequently called by wrong names for the simple reason that the speaker knew no better, and it is the purport of this article to present in simple and untechnical language the reasons why a quail is not a partridge, nor a grouse, a pheasant. This may seem an easy thing to do, for an ornithologist would easily recognize the characters that separated each group from the others; but when one undertakes to make the differences that distinguish, for instance, quail from partridges clear to the lay mind, he attempts a task far from simple.

In the first place, quail are smaller than partridges, but of course that is an unsatisfactory distinction, for size varies among animals even of the same species, and should never be depended upon. But the main differences are these: The bill of the true quail (and that form is represented by the little European migratory quail, *Coturnix coturnix* LINNAEUS) is small and weak, quite different from the rather powerful bill of the English partridges for instance, or even of our own "Bob White," and the nasal fossæ, or the groove in which the

nostril is placed, is mostly feathered. The first, second, and third feathers of the wing form a point, the first and fourth quills being of equal length, the second and third slightly the longest, and the first feather is broken on the inner web by an incurvation, or is "emarginate," as it is technically called. The tail is very short, the feathers soft and light, and not half so long as the wing, the number of feathers not exceeding twelve among the various species of the genus.

Now, compare these characters with the following belonging to the English partridges (*Perdix perdix* LINNAEUS) and following a similar rotation. The bill is rather large and strong and the nostrils are naked. The first wing feather falls in length between the seventh and eighth, while the fourth is the longest, thus giving a very differently shaped wing. The legs are scaly, and in some partridges have spurs, which are



The Ruffed Grouse.
Strutting previous to Drumming.

never seen on the legs of a quail. The tail has, in the various species of the genera, from sixteen to eighteen feathers, and is a little more than half the length of the wing and rather stiff in texture. It will thus be seen that in several of their important outward characters quail and partridges are very different.

Another rather noticeable point is that the tail coverts (*i. e.*, the feathers that lie above those of the tail proper) extend in the quails to nearly the full length of the tail, but only over the upper half in the

partridge. These distinctions while to the lay mind of little worth, and easily overlooked, yet are essentially of that kind upon which classifications are based, and by which systematic arrangements are formed.

Now, all the birds in North America that are generally called quail, such as the various species and subspecies of Bob Whites, the Massena quail, and the numerous crested and plumed quail of the Southwestern States and of those lying

along the Pacific coast, are partridges, as will be readily seen if they are compared with the characters given above, and which distinguish partridges from quail. But, like many other animals of the New World which have relatives in the Old, while resembling these they have their differences, which are so marked as to cause our birds to be known as American partridges. The especial character which distin-

guishes them from those of the Old World consists of a notch in the edge of the mandible, or lower half of the bill, on either side.

American partridges also differ from each other, so much so, indeed, as to make it necessary that they should be classed in different genera. The characters that present themselves are, with one exception, all external, and consist mainly of the conformation and arrangement of various feathers.

And lest some one should say that feathers seem small things upon which to create generic distinction, I would state that all classification is artificial; there is no such thing in nature, and in order to make some arrangement of the members of the animal kingdom that would be intelligible, naturalists are compelled to construct a classification from the materials at their command, so that as near a natural arrangement as possible of living things can be made. Most

frequently, as in the genera of American partridges, external features are seized upon as characters, and more rarely those that are internal are taken, and in such instances they frequently belong to the skeleton; generic characters, in the writer's opinion, should always be founded upon the animal's structure, for such are less liable to variation. But the genera of American partridges have been es-



The Virginia Partridge.

tablished, as I have said, mainly on external characters, and some of these are so peculiar and unusual as to be very conspicuous and cause their possessors to be recognizable at a glance. Thus, we have the crested partridges, known as Gambels, and the California partridges with the subspecies, distinguished from all their brethren by the peculiar crest, much developed in the male, consisting of a number of overlapping feathers, increasing in width as they go to their extremities and

curving over the base of the bills. These birds are included in the generic term *Lophortyx*. Then, we have the plumed partridges, of the genus *Oreortyx*, of the Rocky Mountain ranges, also distinguished by crests, but in their case this is formed of several long upright feathers, narrow and of nearly equal width. Then, there are the scaly partridges, with crests similar to Bob Whites, but which at times are spread out like a fan, and these go under the term of *Callipepla*. Bob White has simply a full ordinary crest, not particularly remarkable in any way, yet it is different from his brethren and not so ornamental. The Massena partridge of all the species is included in a genus founded solely on a structural character, viz., the unusual length of the claw upon the hind toe, and is known as *Cyrtonyx massena*.

As a rule, American partridges are smaller birds than those of the Old World, and in color of plumage and decorations, such as tufts and variously formed crests, have little resemblance to their foreign relatives.

Let us now consider the ruffed grouse, called partridge or pheasant wherever found, and which very rarely receives its proper appellation. This bird is a grouse and nothing else, and cannot be mistaken for anything else by the most indifferent observer. The distinguishing character of grouse the world over is the more or less completely feathered legs and feet. The birds of this group are separated into three divisions—those that have the leg feathered to the heel, those that have it feathered to the toes, and those that have both leg and feet covered with feathers. The ruffed grouse belongs to the first of these groups, leg feathered to the heel, and consequently cannot possibly be a partridge, which never has feathers on its

legs, and a more erroneous name could not possibly be given it. Nor is it a pheasant, which bird, indeed, belongs to an entirely distinct family.

The pinnated grouse, which at one time was so numerous in various parts of our country, belongs to the second division, with legs feathered to the toes; while the ptarmigan finds its appropriate place in the last division, and has even its toes covered with feathers. The majority of sportsmen know little of ptarmigan, as their habitat is far in the north, even in the Arctic regions, in districts penetrated by few white men. All these varieties of grouse are members of different genera, the characters taken from the methods in which the legs are feathered, as well as the form of the tail (as seen in the Cock-of-the-plains), the possession of air-sacs on the neck, or their absence, etc. The grouse are a group apart by themselves, easily distinguished from other game-birds, with their own peculiar and determining characters.

The *Phasianidae* is only represented in the North American fauna by the wild turkeys, and its members are remarkable, with but

few exceptions, for the brilliant metallic coloring of their plumage. But laying aside many of their important characteristics, the bare, often heavily spurred leg indicates at once its lack of affinity to such species as the ruffed grouse, and nothing could be more inappropriate or incorrect than to call that bird a pheasant.

Among the water-birds, the line between geese and ducks and between swans and geese is not altogether easy to draw, but usually the long neck of the swan will show what it is, although there are short-necked swans and long-necked geese, while the peculiar-shaped bill of one ge-



Photo by Edw. A. Eames.

California Valley Quail.

nus of goose will generally serve to distinguish it from the others.

This group embraces the snow geese of the genus *Chen*, and the bills of its members are powerful, high at base and contracting almost to a point at the tip, with the sides above the cutting edges of the mandibles hollowed, and the roughened edges visible, giving the birds a grinning expression. Another genus, *Exanthemops*, contains but one species, Ross's snow goose, the smallest of all geese, and remarkable for having the skin at the base of the bill covered with large, round, wart-like excrescences, whence the generic name.

The ducks in their four divisions of sea, fresh-water, spine-tail, and mergansers, or saw-bill ducks, are easily recognizable. The fresh-water and sea ducks are readily distinguished from each other by the form of the hind toe. This is of a normal shape in the fresh-water ducks, such as the mallard, teal, etc., but in the other division, as the canvas-back, etc., the hind toe is flat and lobed, covered with a skin, and the feet are much larger and the legs placed farther back on the body. The spine-tail ducks are represented by the little ruddy duck, known by as many aliases as there are places it frequents, and noted for its stiff spiny tail, which is frequently carried straight upward when the bird is swimming. And, as every one knows, the mergansers have long, narrow bills, with the edges serrated, similar to that of a saw, and from which they obtain their trivial name of saw-bill.

It is, however, a fruitless task to attempt to bestow a name on each species that would be accepted by all, for the water-fowl have as many names as there are localities for them to visit.

The last order of birds which may properly be called game is that containing the shore-birds, although I am quite aware some consider the rail entitled to that epithet. This order, generally speaking, contains the snipe and plover. There is no valid reason why any one should confound these or call them by the wrong name. At one time it was considered a plover could always be recognized by the absence of a hind toe, but that will not answer at the present day, for there are snipe, more properly sandpiper, without

a hind toe, and plover with a rudimentary one.

Two characters possessed by these birds entirely different from each other distinguish snipe and plover, these names being employed in their general sense. On the head of snipe and sandpiper the feathers stop abruptly at the base of the bill, and the nostrils are situated in grooves, that sometimes run nearly to the end of the bill, and are merely narrow slits. In the plover, the feathers of the forehead in some instances reach the nostrils and do not cease so abruptly, while the nostrils open in a skin which fills the nasal groove, and are rather wide. The head of a plover is large and rounded and slopes rapidly to the bill, while the snipe's has a more gradual descent.

Treating the subject briefly, sufficient has been shown in the characters given why some of our game-birds are erroneously named, and how they can be recognized and distinguished from the species with which they have been so long confounded; and, although it cannot be expected that a habit of such long standing can be even checked with one effort, yet when bird-lovers and bird-observers learn the reason why the popular nomenclature to which they have been so long accustomed is incorrect, it is to be hoped they will see the error of their ways and turn to those which are right.



Blackbellied Plover.

WEATHER WRINKLES FOR YACHTSMEN.

By A. J. Kenealy.

MY observation has taught me that weather prophets are by no means infallible, and even the man who relies on newspaper forecasts, say for three days ahead, trusts much to luck. They are no more to be depended upon, so far ahead, than are the sapient prognostications of the oldest inhabitant, whose delight it is to foretell rain, drought, and wind. I always give these hoary chaps a wide berth, whether shepherds or sailors, for have I not also practiced the profession; and when I happen to come athwart the hawse of one of them, do I not feel like thrusting my tongue into my cheek and winking my starboard eye like one Roman augur meeting another, end-on, in the Appian Way?

Weatherology is by no means an exact science, yet there are certain signs in the heavens, when taken into cognizance in connection with the readings of that indispensable instrument the barometer, by which the navigator of a small craft may be guided on his adventurous way when undertaking a coasting voyage in which the available harbors are few and far between.

The well-found and able pleasure craft is supposed to be competent to tackle anything in the shape of a summer gale or thunder squall that may be encountered, but all the craft that go a-junketing are not adapted to a tussle with high sea and strong wind. Moreover, stout and seaworthy yachts have often been capsized in a squall, as was Commodore Garner's big schooner *Mohawk* off Stapleton, Staten Island, in July, 1876, and Commodore Carrigan's fine yacht *Idler* on Lake Erie, in July, 1900.

With proper handling these magnificent vessels could easily have weathered the squalls which overwhelmed them. There was ample warning of the storm in each case, but the foolhardy skippers are perennial. It behooves the amateur to avoid the recklessness of the professional and to use such prudence that his little cockleshell may safely weather a savage gust enlivened with lightning flash and made awesome by peals of thunder.

Nobody more requires a goodly store

of weather-lore than the owner of a small craft. Upon the nature of his forecast often depends not only his personal comfort, but safety.

Suppose that he is snugly at anchor in Vineyard Haven and is desirous of venturing on a voyage round Cape Cod. If he is a prudent man he will wait until he feels pretty well convinced that no strong wind, capable of damaging his vessel, is likely to blow during the passage to the port of his destination. In other words, he would not feel like getting under way in threatening weather or with a falling barometer.

The aneroid barometer, from its portability, accuracy, and general reliability, is admirably adapted for a small craft. It may be hung to a bulkhead, stowed away in a box, placed under a pillow or on a shelf. For purposes of reference it is more easy to consult than the mercurial barometer, as well as being more sensitive, showing the minute variations of atmospheric pressure. My advice is to buy a good instrument from a reliable maker and compare it frequently with a mercurial barometer.

The barometer gives only the pressure of the atmosphere in its own locality. As gales are caused by the difference in pressure between two places at some little distance apart, and not by uniform pressure, whether high or low, over a given area, the information which the barometer imparts is only relative. Supplemented, however, by the valuable daily reports and forecasts of the Signal Office, published in the newspapers, intelligent observation of the instrument is of great value.

In a general way, it may be asserted that in the northern hemisphere a rising barometer and a southerly wind foretell fair weather, while a falling barometer and a northerly wind presage bad weather. South of the equator these conditions are reversed. Beyond these indications the barometer, unsupported by other signs, must not be regarded as infallible.

A sudden fall at any time should not be disregarded, even though it should not be accompanied by any other symptoms of a

storm. The quick fall generally gives notice of a sudden change for the worse. When the blow comes it may be violent, but it is usually soon over, while a slow fall of the glass almost invariably indicates that the gale may be protracted.

Some salt-water sage it must have been who dropped into poetry and originated the following rhymes, the truth of which has been long established and which it might be well to memorize :

"Long foretold, long last;
Short notice, soon past."

Or the equally correct axiom :

"First rise after low,
Then expect a stronger blow."

While a rapid rise is indicative of unsettled weather, a gradual rise is more encouraging, as showing that fine weather is coming and will probably last. A north wind in summer generally is foretold by a rising glass, with a cool and dry atmosphere.

Scientists unite in declaring that the moon has no influence whatever on the weather. I bow to their superior knowledge and will not obtrude my own vain imaginings. Nevertheless, a halo round the moon is undoubtedly significant of a coming storm, as is also the mischievous twinkle of the stars seen so often just before a piping nor'wester.

The clouds tell much to the keen observer. The angry, oily black fellows, with hard edges, presage wind; the more ragged they appear the stronger will be the gust.

A saffron sunset also threatens wind; if it is copper-colored or orange, it will both rain and blow.

Soft clouds indicate rain rather than wind.

Anything fantastic in the shape or color of clouds nearly always means a storm. Light clouds scudding across the sky at a great rate presage an increase of wind. Wet and wind generally follow "wind dogs," rainbows in the morning or unusual clearness in the atmosphere.

If you hear very clearly the sound of distant bells or steam whistles, you may prepare for foul weather.

The signal flags of the United States Weather Bureau should never be disregarded. The service is getting more efficient every year. It is a credit to the nation.

With regard to the violent squalls with

thunder and lightning, so prevalent on the Atlantic coast, everybody knows that sufficient warning of their advent is given to afford no excuse for being unprepared. These storms generally rise in the west, dense black clouds piling up through which the lightnings flash. Sometimes it is more than an hour before the squall strikes.

In spite of the nature of these wind-bursts, which should be well known to anybody with half an eye in his head, they have dismasted or capsized hundreds of craft, big and little, and have drowned scores of people.

When threatened by such a squall the sensible navigator takes in every stitch of sail if his boat is small. If possible he lets go his anchor and rides out the storm. If impracticable, he scuds under bare poles. He takes care never to be smitten with the fierce blast with all sail sweated up hard and the halyards and sheets all foul and tangled. Yet through lack of the simplest safeguards the annual death list on salt and fresh water in the United States is large.

The only time when a yachtsman has an excuse for a little reckless sail carrying in a squall is when his craft is racing. Even then if he be prudent he has men stationed at sheets and halyards, ready to let fly everything at a moment's notice.

There is rhyme also about squalls, remarkable rather for the horse sense therein embodied than for its poetic or metrical beauty. This, for instance :

"If rain comes before wind,
The topsail halyards you must mind.
When the wind's before the rain,
Hoist your topsails up again."

This is apropos of the fact that in the heaviest squalls the rain, driven ahead by the strong wind, strikes the ship first. When rain comes after the first fury of the squall, the worst of it is over and sail can be made again.

It is an old sea saying that no water except that in a well is secure from squalls, and thus it is a capital plan to keep your weather eye open all the time when afloat in a sailing craft. The white squall of the West Indies and the pompero of the River Plate are happily unknown in these waters, but the black thunder squall, which is such a familiar feature of our summers, is far more deadly than either of these much dreaded phenomena.

MY FIRST LAND-LOCKED SALMON.

By Carrie Foote Weeks.

IT was a beautiful, hazy September afternoon, and we, or rather he, was fishing on one of the many lakes that trail the Rangeley country like a chain of turquoises.

I yawned, in my chair-seat at one end of the boat, as I watched the Philosopher



There are Guides and Guides, as Every One Knows.

choose his fly, with the eye of a connoisseur. Was it a Brown Hackle, an Abbey, a Professor, or something new, to fit this particular day and hour?

Our picturesque guide untiringly rowed us up and down, across and around, following trout trails with a glance, as easily as a setter's nose scents quail.

It was a distinct pleasure to look at this native, straight and strong, with muscles playing beneath skin as brown as pine needles, child-like blue eyes, and teeth gleaming white through his tawny mustache. He was shaven, his corduroys were clean, and "he could locate every fish in the pond," to quote his friends. Clear-

ly, we were in luck; for there are guides and guides, as every one knows.

I did not intend to fish, and my seven-ounce split-bamboo rod reposed in the bottom of the boat.

I even brought it under protest, that dear little rod which had gone with me so often, as I followed mountain streams in search of those wary, fighty, cocky little brook trout. There *was* sport!

To follow a brook, to see a "hole" hemmed in by birches or alders; to stand on rolling stones, and cast your line gently, gently, as you hide in shadow; to feel your fly nipped by a passing flash; to give a quick jerk of the rod, only to find your hook fast in an old log, under which the trout has hidden. That is all pleasure and excitement; but to cast or troll from a boat all day, waiting for something to come along, how stupid!

"Yes, Mr. Philosopher, I know that sportsmen do it, from April to September, and longer; but it seems lazy, and it can't be exciting."

You see, I had never tried it!

I was idly murmuring these platitudes, when the Philosopher's line tightened, was let out quickly, reeled in a bit, and in a few moments a fat pound trout was landed, mercifully dispatched, and placed in the creel, his "sea of troubles" over.

That was not so stupid, and he looked big, in comparison with my brook trout of memory.

It was growing cloudy, and a bit of wind had sprung up. Lines of crows circled above, led by their general, who caw-cawed as if he had his regiment out on dress parade. In the West, seen through primeval pines, the sky gleamed, like another lake of gold.

A second trout flopped over the side. "Weather's most right fur salmon," said the guide.

"Why don't you try it?" suggested the Philosopher, insidiously, to me.

That last trout had set my pulses beating, but I answered, indifferently enough, "I will, of course, if you wish, and will fit my pole, and fix my hook," which he proceeded to do, like the good Philosopher he is.

I reeled out a number of yards, cast off, and finally caught a tiny trout.

"You see, my forte is brook trout," I said, quietly, but the excitement was growing.

The guide was patiently rowing back and forth in a short stretch not over two hundred yards long. "Let's go somewhere else," I suggested, and at that moment I felt a tug, as if my heart were pulled out of me, followed by that sharp whir of the reel going round and round as if worked by invisible hands; and yards of line disappeared.

"By gorry, *a salmon*," yelled the guide. "Reel up, reel up," and he rowed frantically in the opposite direction.

"Take my rod," I screamed to the Philosopher, as if he were deaf; "I feel faint, and I shall lose him."

"No, sir," he answered, "you catch your own salmon, and don't be a woman."

I began to reel up with trembling fingers, which were all thumbs, when the guide said, quickly, "Give him line"—and rowed towards this unseen monster, who was pulling until my bamboo rod bent almost double.

That good guide—to him be all the credit.

The Philosopher looked at his watch. It was 4:10 p. m.

Then began a series of reeling out and winding in, which served to steady my hand and nerves; and finally there was a splash, a miniature fountain, a glimpse of colored spots, and the glint of a fiery eye. I know I saw that eye. I shuddered, and have never forgotten it.

"What was that?" I asked, feebly.

"Broke water," answered both men at the same time, with evident gusto.

"When can I land him?" I gasped.

"Dunno," said the guide, shortly; then added, as an afterthought:

"Ole fellar fram *New York*, played his fish nigh three hours this spring, 'n then lost him. No fault of his'n, though," he

continued, as he saw my look of consternation. "'Nother sport said he didn't know whether he'd land his salmon, or the salmon 'd land him. 'Twus nip and tuck."

"Are you tired? Shall I take a hand?" asked the Philosopher, anxiously.

"I think I'll see it through," I answered, stoutly, and the reel whizzed for the twentieth time, and the fish broke water again. I was sure the line had snapped, but Providence smiles on beginners, in sports as well as in cards.

"He has gone," I cried; "I have lost him. There is nothing at the end of my line."

"Gone to the bottom to sulk," said the guide, reassuringly. "Don't you fret, you're adoin' all right, and I'll work the landing net."

After a short sulk, Mr. Salmon made things busy again for a while, but his strength was gradually waning; and, obeying instructions, I reeled up slowly, making the distance between him and the boat shorter and shorter.



The Weighing In.

The guide, with a landing net in his hand, was hanging over the side, while the Philosopher sculled gently with one oar.

"Reel up, reel up, reel up, *give him line*," the guide chanted, in a sing-song tone; and I tried to obey, like a raw re-

cruit, no doubt; entirely unconscious of aching muscles and numb fingers—that came later.

At last the great, final moment arrived. A pull, a leap, a parting of waters, a swift movement of the guide's strong wrist; and struggling in his netted prison was the most beautiful fish I had ever seen.

"Ain't he handsome!" said the guide, slowly and reverently. I tried to speak, and discovered to my surprise that the long strain on my strength, the uncertainty of success up to the last moment, and the gallant struggle of the fish, had been too much for my nerves.

"Now, don't be a woman," said the Philosopher, as he looked at his watch. "It took you exactly fifty-seven minutes to land him, and it would have taken twice that time without the guide's valuable aid."

"With no fish at the end," I added, and then I laughed.

We had quite an ovation at the little wharf, on our return. It was the first salmon brought in for a week; and fishermen crowded around at the weighing, poking the fish, asking questions, and criticising.

He weighed a trifle under six pounds, and one old gentleman, whose luck had been poor for five days, said:

"H'm, he is pretty thin for his length." The guide winked at me solemnly, yet expressively; and his lowered eyelid said, more plainly than words could have done, "Sour grapes."

That salmon was a turning-point in my life. I gained a taste of the true fisherman's spirit, which I shall never lose. Nor shall I ever forget the first tug of that salmon at the hook, or his last struggle for liberty, and life. It would be an honor for any one of us to die as bravely as he did—to die game!

DELUSIONS ABOUT HYDROPHOBIA.

By Rollin E. Smith.

IT is not strange, perhaps, that hydrophobia or rabies, one of the most dreaded of diseases, should also, outside of medical circles, be one of the least understood, when it is considered that whilst the name is almost as familiar as that of the commonest complaint, the practicing physician who has ever seen a case is a rare exception. Indeed, so difficult is it to find a physician who has ever treated a case of real hydrophobia, or a sportsman, or a dog-fancier, who has ever seen a dog suffering with rabies, that one skeptically inclined might easily and conscientiously declare the disease a myth and a mad dog the creature of fiction. To fiction, in fact, the widespread illusions are largely due that enshroud the plain facts, and by fiction they are perpetuated, whether written or by word of mouth.

The delusions are many. It is not at all difficult to discover some one who will relate how his grandfather killed a mad dog under peculiar and blood-curdling circumstances; and the brave boy who confronted a raging, frothing beast while the rest of the villagers made their escape

is a matter of well-remembered childhood fiction.

I even knew a man, who, when a boy, was bitten by a dog supposed to be mad, and was miraculously saved from death by means of a mad-stone. This man firmly believed that the dog was mad, and as sincerely averred that the mad-stone, which was not laid upon the wound until some hours later, absorbed the virus and saved his life.

A mad-stone is harder to locate than a physician who has treated a case of hydrophobia; yet there is, in the minds of many people, a clinging and superstitious belief in its efficacy.

Another very popular delusion is the belief that the virus may linger in an inoculated person's system for years; and, although the dog was healthy at the time he bit the person, should he be attacked by rabies many months or even years later, then the latent virus in the victim's veins will, in sympathy, assert itself, and hydrophobia follow.

Many intelligent people having heard this believe it, never having heard it contradicted.

Although it is quite natural that one should have a revengeful feeling toward even a healthy dog that has bitten one, and want him killed, this belief of subsequent development is unquestionably largely responsible for many peremptory demands that the dog be killed. If the dog is dead, it is shrewdly argued, he cannot possibly become rabid at some future time, therefore the victim of his bite is safe from hydrophobia.

Before touching on hydrophobia, it may be well to note the effect that suggestion has in producing symptoms almost identical with those of the dreaded disease itself. In passing, it may be said that if suggestion can produce the symptoms, there is no reason why a mad-stone should not remove them. Pseudo-rabies is an affection of not infrequent occurrence. Though it closely resembles hydrophobia, it is only hysteria which develops in a nervous person who has been bitten by a dog. He may have paroxysms, and even imagine that he cannot drink. One physician, in writing of hydrophobia, says that it is not impossible that a majority of cases of alleged recovery from hydrophobia have been of the hysterical form.

Sometimes men even die from very dread of the disease. Some three years ago, at St. Michael's Hospital, in Newark, N. J., the death of one, Glenn, was reported as mainly due to this cause. He had been bitten by a dog some weeks previously, and insisted from the first that he would die. He also demanded the dog's death—and the dog was, foolishly, killed. Fear of hydrophobia preyed upon this man's mind, and he could talk of nothing else. He finally had many of the symptoms, including violent paroxysms, and died; but the decision of the attending physician was that he died of simulated hydrophobia complicated by pneumonia.

Occasionally paroxysms appear in a remarkably short space of time after the sufferer has been bitten, which proves conclusively that the attack is due to hysteria brought on by fright. The first symptoms of hydrophobia appear in from six weeks to two months after inoculation; yet fear of the disease—suggestion—may produce them in a few hours. One case that came under my observation was of a young man in

New York City, who had been bitten on the wrist, while in play, by a pet Skye terrier. He was frightened, and thought of hydrophobia. He ran at once to a drug-store near by for treatment, and was told by a clerk that he was in danger of hydrophobia. Within six hours he had convulsions and other well-marked symptoms, and was taken to St. John's Hospital. It was a clear case of hysteria, and not hydrophobia.

The almost universal suggestion of hydrophobia at the mention of a dog-bite is but the effect of published accounts of the disease in its most horrible phases, for very few men have ever seen a case of rabies, and fewer physicians have ever treated a case of hydrophobia, so rare is the disease in this country. In 1892, Dr. William Osler, professor of medicine in Johns Hopkins University, wrote that since 1867 he had seen but two cases of hydrophobia. Dr. J. C. Warren, professor of surgery in Harvard University, wrote on the prevalence of the disease as follows: "In New York City, in thirty-five years (dates not given), there were seventy-six deaths. In nine of these years there were no deaths. In Boston, in 1889-90, there was an epidemic of rabies, and some sixty cases (in dogs) were reported at the Harvard Veterinary Hospital. In the summer of 1890, three cases in man were reported in the Boston City Hospital."

The prevalence of *the belief* in hydrophobia, in contradistinction to the number of *actual cases*, led finally, in May, 1897, to the matter being taken up by the American Kennel Club, of which the following gentlemen are the officers: August Belmont, president; Edward Brooks, vice-president, and A. P. Vredenburg, secretary-treasurer. A committee was appointed by the club to investigate as to the prevalence of rabies in the United States. At the next annual meeting of the club, at Madison Square Garden, New York, February 23d, 1898, Dr. Rush Huidekoper, chairman of the committee, reported, on behalf of Drs. Austin Peters, of Boston; Leonard Pearson, of Philadelphia; Richard Price, of St. Paul; J. C. Roberts, of Agricultural College, Mississippi; Westley Mills, of Montreal, and himself, that during the previous summer and autumn they had issued several hundred circulars to prominent veterina-

rians, health officers, and State officials throughout the United States and Canada. In reply to these, answers were received from all the States and Territories of the United States and provinces of British America, either directly or through veterinarians who had been residents of them, some 150 replies in all.

The country was divided by the committee into several sections, and each member investigated the source and accuracy of each reply, and summarized those of his own section, as follows: Dr. Peters, the New England States; Dr. Huidekoper, New York and New Jersey; Dr. Pearson, the Middle States; Dr. Price, the Western States; Dr. Roberts, the Southern States; Dr. Mills, British America.

In his report, Dr. Huidekoper summarized the results of the various reports as follows:

"In the New England States rabies is unknown north of Massachusetts and in Rhode Island. There is a small area in eastern Massachusetts where occasional outbreaks occur. In Connecticut only isolated cases have been recognized. In New York and New Jersey only isolated and rare cases are seen.

"In the Middle States, Pennsylvania has an infected district, extending some fifty miles west and south of Philadelphia, which originated in the suburbs of Philadelphia about 1870, and had gradually spread, but in it only about 200 cases have occurred in twenty years, and of these over 100 have been in a half-dozen localities. For the remainder of Pennsylvania, Delaware, Maryland, District of Columbia, and Virginia, the disease has only been known in rare and isolated cases.

"There is little proof of the existence of rabies in the Southern States, and in the States bordering the eastern bank of the Mississippi River.

"From Dr. Price's report, it appears that less than 100 cases have been recognized in Wisconsin, Iowa, Minnesota, Nebraska, Colorado, Oklahoma, and Kansas. The disease is unknown west of the Rocky Mountains.

"In Canada a few cases have appeared in the province of Ontario, and rabies is unknown in the other provinces."

He also submitted a file of letters in which twenty accounts of accidents with rabid dogs were reported in the New York newspapers during the previous two years, and upon investigation they were found to be based absolutely upon

imagination. In over half of them the street and number, and the persons described, could not be found by the city directory, the United States mail, or by personal search.

"Without any reflection," he added, "upon the honesty of the opinion of some of our colleagues who have reported isolated cases, we are convinced that many of these cases are errors of diagnosis, and that our report covers fully the extent of the disease in North America."

With the infrequency of rabies, and the still fewer victims of the bite of mad dogs, there is no good reason why any city should ever have a legitimate mad-dog scare, nor why the bite of a healthy dog should be dreaded as the bite of a rattlesnake.

The danger from snake-bite is apparently much better comprehended, broadly speaking, than from dog-bite. Every child that lives in the country learns that the little striped garter snake is harmless, and even should it bite one, no alarm would be felt. The harmless and the venomous snakes are distinctly classed and the danger understood. Yet—still broadly speaking—there is no distinction as to dog bites.

A little understanding of the disease would often allay the fears of timorous persons and relieve much suffering of mind. For instance, if your dog has been bitten by another dog supposedly suffering from rabies, it will show symptoms of the disease in three to four weeks, as a rule; and the duration of the rabies in a dog is never in excess of ten days. In the majority of cases, he dies on the fourth or sixth day after the appearance of the first symptoms.

Knowing that a rabid dog will, almost to a certainty, die within ten days; or, if he should recover, which occurs in exceedingly rare cases, the symptoms will be so marked in ten days or less that the disease may be recognized, the suspected animal should be kept in confinement during that period whenever possible. Do not kill such a dog, for if the dog is killed, any person who may have been bitten by him will have no peace of mind for months to come, and may take treatment at the Pasteur Institute, whereas ten days' confinement of the dog would have demonstrated whether there was any cause for apprehension.

It is highly desirable that the health inspector in every city take measures to secure suspected dogs and keep them in confinement, rather than to have them killed. This has been done in some cities, with the result that the dog has, in almost every case, proved his innocence.

As the period of incubation in man is of longer duration than in dogs, it is perfectly safe to wait until it has been demonstrated whether the dog has rabies, before taking treatment. But it is always desirable to cauterize the wound, for serious results may follow, as they may from the puncture of a nail or a splinter.

In man, the first symptoms of hydrophobia usually make their appearance in the second month after inoculation, and rarely after the third month. Conservative physicians regard with suspicion reports of the disease appearing after six, eight, or ten months, and there are no authentic records of its appearance after several years. In man, the disease is of short duration, lasting but two to six days, notwithstanding that the period of incubation is of several weeks.

The general fear of hydrophobia would, for lack of anything tangible to feed upon, die out, if its life were not continually fanned by fiction—fiction of the sensational press. The reporter, in his daily grind for "live news," is undoubt-

edly often put to straits, and he recognizes the fact that the city editor looks upon a mad-dog scare as "good stuff." The result is the appearance of numerous articles that are enough to cause any man to look with suspicion even upon his favorite dog; while the playful snarl of a pet terrier might well cause a gentler dog-fancier—one who shrieks at sight of a friendly little mouse—an attack of hysteria. As for children who read such sensational accounts, the fear of hydrophobia will follow them through life.

Taking the best, and, in fact, the only evidences that can be obtained, namely, the writings of a few physicians and the report of the American Kennel Club committee, the decision must be that rabies is a rare disease in this country, probably not averaging two dozen cases a year. Then, too, it should be considered that the disease is limited to a few localities, and that every rabid dog does not bite some human victim. Add to this the established and recognized fact that only about 20 per cent. of the persons bitten by mad dogs are attacked by hydrophobia, and it will be realized that the disease is not, in this country, one to terrorize communities, nor to harrow the souls and shatter the nervous systems of people who may be bitten by pet or even by strange dogs.

FIELD FLOWERS.

By Elwyn Irving Hoffman.

I cannot behold you, fair flowers of the field,
But my heart to your beauty must certainly yield;
And your color and fragrance take sway o'er my heart
With a strength more compelling than the magic of Art.
You are humble, and small, and grow near to the sod,
Yet you bear, in your freshness, the goodness of God,
And the magic of Love, and the sweetness of Faith,
And a grand nameless *Something* that lives beyond Death!

THE BOATS OF THE FAR EAST.

By Caspar Whitney.



Japanese
Sampan
under
Sail.

THE men of the East studied boats as well as stars, and were learned in each. The Oriental is a waterman unequaled in all the world. None has such intimacy as he with river craft; nowhere else are there boats so thoroughly adapted to local needs; not in the most skilled boat-building centers may be found models so well adapted to moving through the water, easily, swiftly, noiselessly.

The floating population of the Far East is beyond computation. The Asiatic waterman and his boat are inseparable; throughout the greater part of the Orient it is his cradle and his bier. Every boat is a boat-house to the Chinese riverman, and in countless thousands he is born, and lives, and dies upon them. In the Hong Kong harbor

I spent days paddling among the twenty thousand human beings who have no other habitation; while in Canton the number is estimated to be upwards of two hundred thousand. And these, bear in mind, have no connection—indeed, almost no association—with the shore; they are quite a separate class from the landmen, with whom they come into occasional contact only while doing long-shoreman work. For the rest, they keep to their boats, which, in the harbor, are arranged in blocks and lanes by the authorities.

Siam, which is traversed by several far-reaching rivers, and, in its southern part, interlaced by canals cut through the jungle, has other thousands who live upon their boats. The Malay Peninsula likewise has many inland waterways, natural ones, however, and on these the boat of the native abounds, though he lives upon it less than the Siamese. Burmah has fewer inland waterways, and the boating of the native is therefore confined more largely to the coast. In India, along the coast, and on its famous, if filthy, rivers, the native boatmen ply untiringly, or huddle into settlements of great numbers.

In Japan every harbor has its class that knows no other home than its boat; but



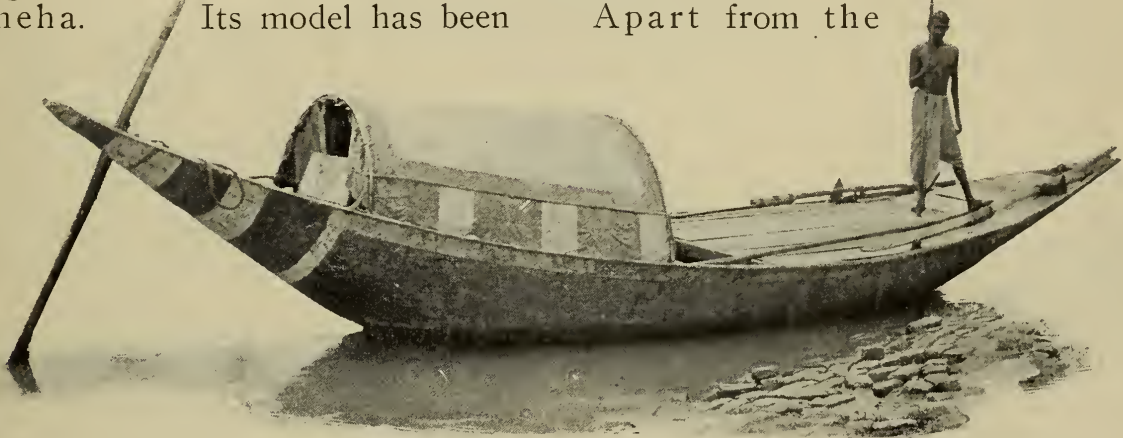
The Native Hawaiian Canoe.

nowhere in the East is the floating population in such vast hordes as in China, where merely to exist demands of those wondrously diligent and inscrutable people an economy such as none can realize who has not seen it in its native environment.

Following in the glow of the setting sun, the first Eastern boatman whom we encounter is the native of Hawaii, and perhaps none of all the consummate watermen among Oriental boatmen is more masterful than he. His canoe of to-day is the type of the day of Hawaii's first and greatest native ruler, Kamehameha. Its model has been

Sometimes the outrigger idea is developed into a catamaran, but the type is not common. Nor is the Polynesian canoe used under sail. But the play of the Polynesian has always centered about a canoe, and there is no sport in any country to surpass his in surf-riding, which perhaps is carried to a higher degree of perfection than elsewhere off the coast of Oahu, one of the Hawaiian group. The Samoan and Hawaiian paddle is long and stout, with short, wide blade, suitable for rough, open water work.

Apart from the



The Dinghy—the Native Passenger and Living Boat of India.

not a particle changed, and for the very good reason that for the island's open waterways it could not be improved. It is a dug-out, fairly deep and narrow, with bow and stern starboard outrigger about five feet long, to which is attached, at the farthest end, a buoyant spar about six inches in diameter that extends for three-quarters of the length of the canoe. This outrigger is typical of the Polynesian canoe; but the Hawaiian canoe itself differs in model from the Samoan in showing no distinction between bow and stern, whereas the Samoan has rather clean bow and stern lines.

The Hawaiian outriggers, too, are not quite like the Samoan, the latter being braced at the extreme outboard end by a cross-piece, and showing less space between the hull and the floating cross-spar than the Hawaiian. With such a rig I have seen these light canoes go through very rough water, and the fact that in the earliest days the natives cruised from one island to another of the Hawaiian group indorses their seaworthiness.

various-sized junks and traveling or house boats common to both Chinese and Japanese waters, the usual small craft of Japan is the *sampan*. Now the *sampan*, with some differences of rig and propulsion, is the passenger ferry and general bum boat of Japan, China, the Malayan and the Burmese coasts. In general, its lines are identical, but there are variations in the rig, even in different parts of the same country, and sometimes even in the shape of the *sampan* itself. For example, there is a variety at Nagasaki which differs from those elsewhere in Japan in carrying a deck-house and having a more pointed bow. However much the Japanese *sampans* may differ, they are always propelled by sculling, usually a single oar at the port side of the stern, but, often when the load is heavy or especial speed is required, another oar and man scull also at the starboard side.

Everywhere except in Japan the *sampan* is invariably propelled by two oars, and in all these Asiatic countries the craft is as frequently under sail as under oars.

The average Chinese *sampan* is from

about 15 to 18 feet in length, and is invariably of one shape wherever found. It is propelled by one man and two oars—the oarsman standing to his work facing the bow, and pushing the oars, instead of pulling them. The Asiatic rowlock is a piece of rotan (Anglicized and vulgarized rattan), twisted about the top of an upright sunk into the gunwale, which must be generously sprinkled with water now and again to soften its complaining squeak. The oars are of two pieces—handle and blade—lashed together after the manner usual throughout the Far East.

Although by no means an attractive-

sula, and along the coast of Burmah, where the stern posts have a higher and sharper rake bow-wards, and are resplendent in yellow and blue diamond-shape patches. The *sampan* of Rangoon and Northern Malaya is manned by Tamils (natives of Madras, India), but elsewhere the crew is solitary John Chinaman—the industrial backbone of Siam and Malaya.

Next to the Siamese, the Malays are the most habitual river people in the world. Like the Siamese, they settle along the waterways of their country, and also build their houses on piles from six to



A View of the Menam River at Bangkok, Siam.

looking model, yet the *sampan* will carry an extraordinary load, and moves with notable ease for a boat having such breadth of beam. Under sail it is seaworthy and surprisingly fast. I have weathered water in it which I would not have believed the *sampan* could survive. The Japanese, Chinese, and the Malayan coasts are more especially the waters of this craft, yet it is seen on the Burmese coast, and in comparatively few numbers also in Siam. There is some slight change in its lines on the extreme northern coast of the Malay Penin-

insula, as precaution against both flood and fever. In speaking of the Malays, I include the Malay Peninsula, Java, Sumatra, and Borneo, though there is this difference: that while in the Malay Peninsula probably three-quarters of the people live on the river banks, in Java, Sumatra, and Borneo a very considerable number live in the so-called up-country districts; wherever his habitat, however, the Malay is certain never to be very far from the water.

The two boats most frequently seen on Malayan waters are the *tong-kong* and

the *prau*. The *tong-kong* is propelled by paddles, usually two, one each at the bow and the stern, and is the model used on very small waterways. It is a dug-out, and is sometimes enlarged very materially without altering its lines, although it is commonly built for one, two, and four paddles. I have seen such a canoe arranged for twenty to twenty-five paddles, when it becomes a *tringganu* (one of the native districts of Northern Malay), and is used only on gala occasions. It is a very buoyant and easily driven craft, and when hunting in Sumatra I used a four-paddle one and found it exceedingly handy on the very narrow streams which creep through the dense foliage of the jungles. Made on its smallest model, this dug-out becomes the *jalo*, and is the little canoe which swarms around the incoming steamers at Singapore, manned by native boys, who dive for pieces of silver thrown into the water by amused travelers.

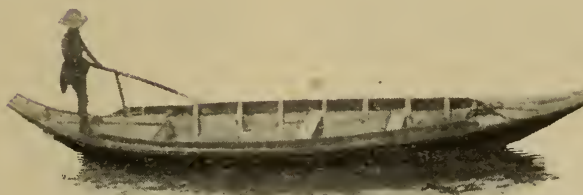
The distinctly Malayan type, however, is the *prau*, which is a boat of exceedingly graceful and dainty lines, quite the best to be seen in all Malaya,



Siamese Native Dug-Out.



Japanese Sampan at Nagasaki



Rua Chang—Siamese Row-Boat.



Chinese Sampan—the Utility Boat of the Far East.



Malay Prau.

and as good as even the best of the Siamese. It is the craft in which the Malay pirates, of a time not long gone, stole out from the many indentations of their shore upon the unsuspecting and sluggish-moving coaster. It was the troop ship which in the old days of feuds took a chief and his fighting crew from one river to another. With its sharp bow and fine stern, it is fast under sail, and most seaworthy, as I discovered on some roughish water in the large rivers of Sumatra.

Around Singapore a few of these boats are used as passenger carriers from the steamers to the wharves, in which case they are pulled by oars and manned by Tamils; but on the rivers of the Peninsula and in Sumatra, the *prau*, when not under sail, is invariably paddled, the paddle having a long, narrow blade, running off to a point at its very end, for noiseless, skillful work in the still waterways of the interior.

The Siamese are the most expert of Eastern watermen, and, in utter abandon and absolute control of their craft amidst difficulties, equaled, in my opinion, only by the Esquimaux. The



Burmese House and Passenger Boats.

Siamese comes naturally by his notable skill, for the highways of his country are rivers which drain it from north to south, and are connected by innumerable *klongs* (canals), cross - sectioning its southern half. Except in the most northerly part, there is practically no overland travel, and along these water-courses, raised on piles, stretch the thatched houses of the natives.

The boats of the Siamese are innumerable. They are of many sizes and styles, but always beautifully, if simply, constructed of teak. No people in the world, indeed, has such variety of craft, or craft with lines so invariably graceful. Every man, woman, and child in the lower country seems skilled with the paddle, which is used for all the smaller boats, though the oar is employed on the large ones.

The most common type of boat on the larger rivers is the *rua chang*, which,

around Bangkok, is the passenger ferry-boat, and on smaller waterways becomes a boat of state when the occasion warrants. It is propelled by a single oar, and the row-lock is a bit of twisted rotan fastened to the top of a post eighteen or more inches high, set a bit forward of the stern on the port side. The oarsman stands on the star-board side of the stern and sends the boat forward by pushing the oar from him, bringing it back, without

taking the blade out of the water, with the familiar sculler's motion. This much of the stroke is quite like that of the Venetian gondolier, although the body movement of the Siamese is much more rhythmical. As he goes forward on the push, the body moves smoothly, and the left foot clears the deck and swings gracefully in time with the oar.

The *rua chang* supplies the rudimentary lines for a great many of the other Siamese boats. Made a little larger and with a more decided upward rake to the stern, it is used ordinarily for sailing, or it may be fitted and propelled by three oars, exclusive of a helmsman, who, on occasion, does some rowing also. This type is used by the small freighters or traders, and has a deck-house made of *atap* (native matting), which is protection against both sun and rain. In gener-



Boat Canal, Yokohama.



Malay Tong-Kong.

al, this is the house-boat used in traveling through Siam, and is made in several sizes, the largest requiring eight oarsmen, four at the bow and four at the stern—a size that affords a small amount of deck room at either end of the house.

The characteristic boat of the *klongs* is more after the dug-out pattern than the *rua chang*. Its bow and stern are flatter, and, heaped with cocoanut, betelnut, and bananas, it is the boat of the peddler throughout all the lower country.

The *klong* is a very busy thoroughfare, used alike by the large and heavily laden rice and fruit boats and these little bum-boats of the small trader. At no time was my admiration for the watermanship of

the Siamese so great as when watching these small craft go bobbing and dipping over the wavelets made by the larger boats. I have seen these little boats guided with masterful skill unconcernedly among large craft and over water of varying commotion, while a boiling pot—over a small and not very steady one-foot-high charcoal-burning stove—maintained its equilibrium on the deck. It is perfectly remarkable how kettles and other utensils, and even babies, seem to adhere as though nailed to the decks of these little Siamese boats. I have never anywhere witnessed watermanship to equal that of the Siamese; and the women are quite as adept as the men, for the Sia-



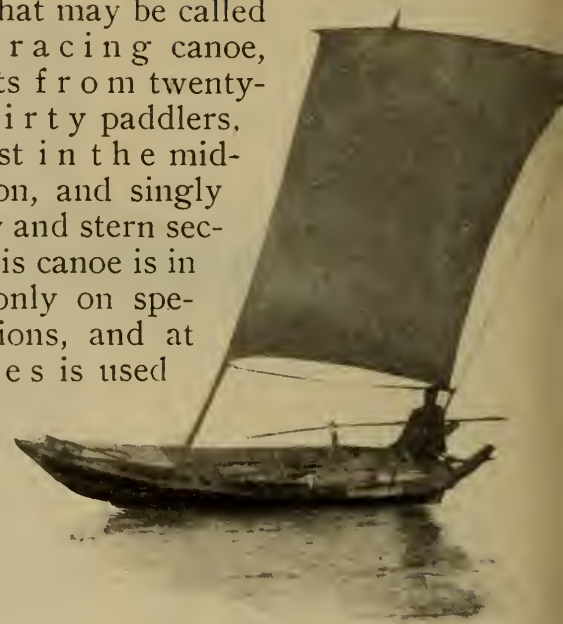
Siamese Royal Racing Canoe.

mese woman of the lower class daily paddles her canoe to market, if, indeed, she does not take part in the heavier pulling of the large boats. Time and again have I seen the mother, with baby strapped on her back, propelling the canoe and at the same time attending to the simple domestic economy.

In by far the larger half of Siam's capital, Bangkok, called, by those who revel in comparisons, the Venice of the East, the easiest means of travel is by boat on canals, which are not so wide as those in the country, and yet are wider than the native business streets.

For fully five miles on both sides of the Menam River, Bangkok stretches its floating shops, and along the banks, back of the shops, resides probably one-third of the city's four hundred thousand in-

lines, is what may be called the royal racing canoe, which seats from twenty-five to thirty paddlers, two abreast in the mid-ship section, and singly in the bow and stern sections. This canoe is in evidence only on special occasions, and at such times is used largely for racing; even though the Siamese, curiously enough, despite



Sampan under Sail.



Burmese Freight-Boat. Higher End is the Stern.

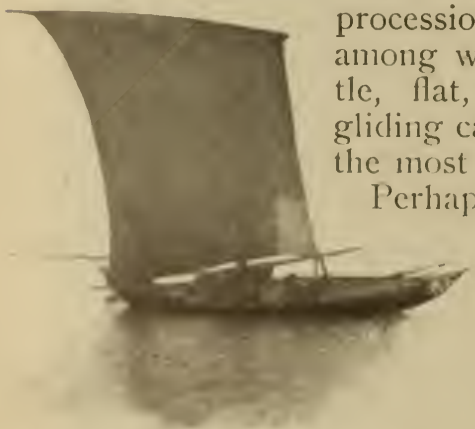
habitants. Over one-half of the remainder live along the *klongs*, which encircle the city and wind through it with all the deviousness of a cow-path. Through these flow a constant procession of boats, among which the little, flat, smoothly gliding canoe is quite the most prominent.

Perhaps one of the most attractive boats of Siam, and certainly one showing exquisite

his variety of boats, indulges in very little, practically in no, racing.

There is one other boat of the Siamese which comes from the northern country where the Laos people live. Its lines are quite like the Burmese freight-boat shown here, except that in the latter the stern is higher than the bow—otherwise, and speaking generally, the Burmese boats are quite like those of the Siamese.

Burmah has not the inland waterways of Siam, therefore neither the variety nor number of small boats; but the workmanship is equally as high, and perhaps more decorative. The usual boat is of the house and passenger type, with a deck-house made of native rushes. The peculiarity of the stern being the higher end is at first rather startling, but, none



Siamese Sail-Boat, also Propelled by Oars (3) on Occasion.



Bombay Yacht Club.

the less, the boats are exceedingly graceful, and the easy lines make them nothing like so difficult to propel through the water as it would seem. It is not an uncommon sight to see three men taking a heavily laden boat along the river with very little difficulty, and moving at a very fair pace.

There is some yachting at the mouth of the Menam River by the very few Europeans who make Bangkok their home; so, also, there is a very little at Singapore; but really the only yachting in the Far East that may be given a name is off Bombay. The Bombay Yacht Club, in fact, is quite an important institution, in a social as well as in a sporting sense. It has quite an imposing club-house at the water's

edge, and is the rendezvous every afternoon for the select who care to listen to the band and drink tea or—whatever else they fancy. Quite a fleet of lateen-rigged one-raters belong to the members, and excellent sport is provided by the regattas, held regularly.

The passenger and general-utility boat of native India is the *dinghy*, which is seen at Calcutta and along the rivers. It is propelled by oars, one each on the port and starboard side of the bow—the oarsmen facing the stern—and steered by another; frequently it is poled. It is the house-boat and bum-boat of the native Indian; most picturesque and Oriental in every line, from bow to stern, and fits its river environment to a nicety.



A Regatta at Bombay.

THE RESULT OF HAVING EFFICIENT GAME WARDENS.

AN OBJECT LESSON FOR THE FARMER.

By Sam. E. Connor.

MAINE is the chief moose-hunting field in the United States, and the principal autumn resort of Eastern sportsmen. Those after lesser game year by year find it in increasing numbers and a widening habitat, and the hunter's camp and the fisherman's canoe stud the land and waters further and wider as year goes by with year.

These results are the effect of wise laws well administered, and the lessons to be drawn from the steps taken by Maine to insure her sporting reputation are pregnant with value to many other States.

The great army of those interested in the work of the game warden divides naturally into two irreconcilable and antagonistic bodies, the sportsman and the poacher; both of them, curiously enough, interested in the maintenance of a good stock of game and fish. One body requires it because it tends toward the common weal through the preservation and restoration of health, and because it ministers to the pleasure of thousands; the other body requires it so that they may minister to their individual purses, at the expense of the public.

In the beginning of the struggle between these elements there was no general check. The State was indifferent, excepting so far as the poacher trespassed upon, and injured, or destroyed, the private property in game or fish which some wealthy man owned as a preserve. He, for the protection of his own rights, employed game-keepers, just as he might have employed watchers of his poultry yard.

There was a strong popular feeling against the private game-keeper, based on some reasons and many prejudices; but one thing may be said in his favor: he was effective within his limits; he was skillful in the knowledge of his business and faithful in the performance of his duties.

In due course of time the State awakened to the necessity of protecting its wild game, outside the reservations, and the fishes of its rivers and lakes. To this end,

restrictive laws were passed, and the State warden was called into legal existence. But where the individual reservationist had succeeded the State failed, because the private owner employed his wardens for their fitness, zeal, and reliability, and the State appointed theirs because there were votes to be gained thereby—in other words, politics ruled.

The result is written wide and deep on the public records. In such an unequal contest the State was sure to lose, and Maine threatened, notwithstanding all its laws and good intentions, to be denuded of its game, and left naked and not ashamed.

Fortunately, all this has been changed, and in no place is the warden system of America now better illustrated than in Maine. In that State of big game and gamy fish, where thousands of sportsmen go each year, and where the amount of fish and game killed yearly is constantly increasing, the amount of poaching, illegal killing, and market hunting is rapidly decreasing, and soon will be practically stopped.

This is the result of the efforts of capable and efficient wardens, appointed by a commission in charge of the department of fish and game in Maine, unhampered by politics, and free to select men, be they white, red, or black, Republican or Democratic, so long as they are convinced that they are honest and capable.

The good results are seen on every hand in Maine. A few wardens now do an amount of work which formerly required thrice their numbers, and the fish and game are better protected than ever in the State's history, as public records, and all sportsmen who visit Maine, will attest.

Remarkable as have been the results, it is still more remarkable that the first practical step toward the present method was made so recently as the year 1896, when Chairman Carleton, of the Commission, who had just received his appointment, decided to break up the conditions that

had prevailed at Bangor, the center of all railroad lines leading to and from the big game districts.

For years it had been well known that the market-men there were shipping out great quantities of deer, moose, caribou, and partridges to Boston and New York, but no one had ever been able to stop them. It was well known, too, that many deer were being taken out of the State contrary to law. To stop this, Mr. Carleton was determined, and so well was this work effected that inside six weeks the market-men were through attempting to ship game, for a large number had been before the court and paid fines for their violations, while the others, though they had escaped detection, had had considerable game seized which had cost them much money. The wardens had also prosecuted a number of railroad men engaged in taking deer out of the game country to sell, and matters in the twinkling of an eye almost, by efficiency and honest effort, began to take on a different aspect in Bangor.

Fortunately, in Maine the wardens had by law already the right to search any and all baggage, express or freight matter, which they had reasons to believe had game concealed in it. It was this authority that they used. They made every sportsman who had game on the trains from the game country identify it—not that he had to pick out his particular deer, but he had to show that he was there, going through with the game. When a deer was found for which no owner could be located, it was seized and sold, the proceeds going into the fish and game fund of the State. While one warden attended to this, the other went through all the baggage, and seized everything of a contraband nature. In that manner they soon had every man who went into the woods impressed with the fact that it would be useless to attempt to take game out of the State contrary to law.

The new wardens then made, and do now, frequent visits to the railroad and steamboat freight sheds, carefully examining any suspicious packages. In this way they soon secured the necessary evidence to break up the shipping of game by the market-men, for once a lot of game was found, it was comparatively easy to trace it back to the market from which it started. In this way the trouble was soon

stopped, for though they did not succeed in finding the shipper in every case, yet the seizure of a few lots broke the market-man's heart, and he quit the game-shipping business. It no longer paid, and "pay" is the poacher's corner-stone.

The present wardens are all experienced woodsmen and guides, and have been appointed because of that and of their known desire to protect game. During the summer months they travel through and through the hunting and fishing region in their canoes, making long journeys of from 150 to 200 miles. They work in pairs, and they know the country through which they travel as well as does the ordinary man the streets of his home city. In winter they snowshoe many hundreds of miles, dropping down upon lumbering camps at the most unexpected times to see that this class of people do no illegal killing.

Naturally the wood wardens meet the guides and sporting-camp keepers, and by pointing out to them the interest they have in the protection of fish and game, they have made most efficient allies. Unrestricted killing means the depleting of the forests of Maine of their game, resulting in sportsmen staying away. There is an excellent example of the value of this missionary work by the wardens in Washington County, which used to be the greatest county for poaching and unlawful shipping in the State. Now the guides down there do everything in their power to break up the business, and they have succeeded.

That the work of the wardens is bringing good results is shown by the reports received from all sections of the State. There are more deer in the State to-day than ever before. Even counties where there have been no deer for twenty years report the presence of game. These reports are especially gratifying, when it is considered that there was taken through Bangor during the last game season over 2,200 deer. Eleven wardens were employed regularly; and in fines alone in the year 1899 they collected \$2,637, a pretty fair indication at this late day of what would have been happening if the laws had remained unenforced. Though perhaps that is not entirely a correct view, for if that condition had continued to exist, even the poacher's occupation would have gone, for very lack of game and fish.

IN THE SHADOW OF THE PINES.

By Henry M. Sayres.

THE train had traveled at the fearsome speed of a mile in five minutes. The four original passengers had dwindled to two—Polly and me—and we left the car empty at the edge of the pine-barrens. It was raining. The faint light faded as the wood thickened; the boles of the great pine-trees stood silent and motionless, their wet sides as black as ink, their long limbs interlacing close beneath the low-lying clouds.

How still it was! How deliciously quiet! The birds were silent; the mosquitoes were drowned; only the gentle crunching of the wet sand under the carriage wheels, and the occasional quick rattle of a shrub against the spokes, with the regular thud of the horse's hoofs, and a soft wind that came and went at intervals with a sigh through the pine-needles, and a tinkle of rain-drops on the carriage roof. Over the underbrush, the thickets, the clumps of scrub-oaks, we could see long gray vistas zigzagging between those black trunks, sometimes leading to a momentary glimpse of a dull sky.

Suddenly the trees stood aside; out of the space flashed a blaze of blue light from a hundred racemes of the lupine, the brilliant clusters standing erect above their thicket of palmate leaves. Wide patches of the plant variegated the ground; it bordered the narrow road; it brushed against the wheels; the horse trampled it.

In the quiet and the peace of the pines all such things appear to grow in broad patches, spreading at their own wayward will, and spattering with color the dull sand of the dim wood. "The white-spiked Clethra flower" illuminates the spaces between the segregated scrub-oaks, and lifts its perfumed bloom above the bushy thickets and hedges with an unexpectedness indescribably delightful. The wood is filled with scattered handfuls of the sand-myrtle (*Leiophyllum buxifolium*), its clustered corymbs of white blossoms like misty mounds of foam against the gray sand; the plant grows nowhere but in the pine-barrens. To see an acre of earth so filled with the white cloudiness of those flowers is worth a journey of many

a mile. Each blossom is a delicate little thing, and its exerted stamens produce in the mass a peculiar mistiness when viewed at a short distance, especially in the shade, a pale cloud resting lightly above each low cluster.

The rain dripped gently, and the overseer lifted the flood-gates a trifle, for the water was running off the cranberry bog, where it had been standing for long. Black and glossy as tar, it raced through the passage, leaving a mound of foam that the soft wind caught and scattered in flakes and shattered into a cool spray and dashed against our faces.

The water flows out of the cedar swamps of the New Jersey pine-barrens, where it may lie deep and still and horrid-looking, cold and terrible, a relentless blackness ready to clutch you and draw you into its sunless depths; but lift it out in a tumbler, and its color is rich, transparent as some brilliant wine, bubbling and sparkling in the light, with a delicious taste of the wild woods and an aroma of the untamed places of nature.

We always find what we take with us, as some one has said of the traveler. But the glory of that evening's sunset was not taken with me; it was a part of the place, for nowhere else could those great trees stand so straight and rigid and black against that blazing sky of burnished gold, whence fiery lances goaded at the dun clouds, and pinned a double rainbow across the sky.

As the twilight crept over the landscape, a burst of music flooded the air, a fluting whose liquid notes filled me with happiness; it was an oft-repeated cry of only three tones, but so soft and sweet, so delicious to the ear, that I could listen all night and not weary of its repetitions. It was the persistent cry of a whippoorwill that stood on the wood-pile under the trees, and inundated the world with his melody. It is, perhaps, the sweetest, the most satisfying thing I have ever heard in nature, not even excepting the notes of the song-thrush of the North or of the mocking-bird in the South. The whippoorwill seems incapable of improvement as a musical whistler.



Early in the evening the "teacher" came through the aromatic forest, and I was glad of a chance to show my gallantry by "seeing her home," because it gave me an opportunity to pass through the woods by night. The moon struggled out of the broken clouds and sifted through the heavy shadows of the tree-tops, as I returned alone, except for the presence of Polly, who never counts at such times.

When the night breeze swayed the boughs, a dust of stars glittered above us, and the moon gleamed yellow as gold on the patches of *Hudsonia* that embroidered the road in masses and tufts of bloom, whose hue was the perfection of yellow, a rich and royal color over which a human eye seldom glances until wandering lunatics like Polly and me pass that way. And through the deep, mysterious woods came the whippoorwill's delicious repetitions, monotonous, yet never the same; always varying in expression, in movement, in crescendo, or as the faintest whisper of a distant wail, as he flung his ballad to the sky in a musical frenzy.

The morning broke so still that I could hear the click of the pine-needles as they fell. When a humming-bird swept past and alighted on a low branch, his whirl shocked the silence. For a moment he rested, flashed brilliantly in the sunlight, and was gone.

Footsteps fall silently in that moist sand. The woman in the doorway of the cabin of slabs was talking so loud and volubly that her words drowned the faint rustling of my approach. The incident soon became a laughable proof of the human nature that makes all the world akin, as well as of an expedient to which the country doctor is not seldom driven in self-protection.

"If I was so sick," she was saying, "that I couldn't hold my head up, I wouldn't never send for Dr. Sharp, for like 's not he'd tell me there wasn't nothin' ailed me. That's what he told Jane Simpson. Says he: 'See here, you Jane Simpson, there ain't nothin' ails you 'cept laziness!'"

The resinous warmth of the pines filled the sunny air. The long shadows of the morning barred and streaked the forest. The sand was sprinkled with bunches of the little white *Comandra umbellata*, a leafy, half-shrubby plant rather common

everywhere, yet of great interest, not only by reason of the cluster of delicate hairs which connect the stamens with the calyx lobes, but chiefly because it is both four-parted and five-parted. The specimens in the pine-barrens showed this peculiarity in the flowers of the same umbel-like cluster, and proved themselves true curiosities. But while I was interested and amused by these pleasing little growths something active happened.

With a rumbling whirl of wings, and loud cries and chatterings, a woodcock leaped out of the grass at my feet. With shrill calls and screams of pain she wheeled over the bushes, only to return and fall on the earth, where she wallowed in the sand and beat the ground with her wings, as if in the agony of a violent death. That well-known trick of a loving mother to deceive being followed by no result, she stopped her performances with a final series of heart-rending cries and a laughable exhibition of avian gymnastics.

The cause was soon apparent. In the hollow at the foot of a scrub-oak a single young bird was crouching, frightened into semi-unconsciousness.

The nest was nothing but a hollow in the ground, but the young bird's beak rested in a fringe of tiny flowers, the *Krigia Virginica*, a bright yellow blossom much like a dwarf dandelion in general appearance. He had only to stick his nose out of his home to have the perfume and the delights of a natural conservatory, and should have been a happy bird, but he seems not to have been, for he told weird stories and frightful yarns and so lost his pleasant dwelling in the grass under the oaks.

Polly was investigating things, of course, and on her own responsibility, with the usual valuable results. Poised ready to flee, her skirts wrapped about her, she stood pointing to a hole in the ground as big as my finger.

"Come quick," she cried; "here's a snake hole!"

"Snake hole, indeed! It is nothing but the burrow of a spider, the *Tarantula arenicola*, which I am happy to see."

"Well," she says, "that isn't much better; but if you will plug him in, I will stay with you a while longer."

"Your 'him' happens to be a 'her,' and if you will settle down on your heels and

come closer, you will see that she erects a tower of little twigs around the mouth of the burrow. She is an intelligent creature, and when she is hungry, as she always is, she mounts her tower, scans the landscape for a belated ant, or for any wandering insect, and, with a rush from the heights of her building, pounces on him and carries him in. I will dig her out and show you how interesting she is in her personal appearance."

"Oh, no!" says Polly. "If I were you I wouldn't disturb her. I—I—I really think she is more interesting where she is; yes, very much more."

"If it is snakes that you want, Polly, I can get you lots of them, and right around this very spot." Polly comes down on her heels and walks away apparently unconcerned, but there was a paleness where a flush was before tingeing her lovely cheek. It was a sin and a shame to "have fun" with her, but—"Black-snakes almost as long as you are tall, and as they glide across the road, this very identical road, they glisten like silk."

"It is getting late," says Polly; "I really——"

"Then the pine-snakes, harmless creatures, white, blotched with brown, beautiful animals, which I have seen in captivity coil and strike almost with the viciousness of a rattlesnake. There are lots of them in the pine-barrens. They are really gentle creatures, Polly, and I have known a man to carry a living one festooned about his neck. The next time you attend a 'snake show' and see the brave maiden loop snakes around her, you will see pine-snakes painted, for the occasion, into a semblance of the venomous reptiles——"

"I should like to turn back, if you please; not that I have any fear of harmless snakes——"

Her silence became the silence of indignation, but the woods were still with that eternal stillness which a chirp of a bird startles into great waves of vibration. The blue flames of the lupine blazed among the trees, the sand-myrtle scattered its white mistiness between the trunks, a crowd of unfurled fern-fronds thronged a vacant space in the woody aisles, where probably three hundred stood crowded together, and lifted their bowed heads high above the damp sand.

Polly forgot the snakes and the spiders, and laughed as she said: "The pigmy bishops have adjourned their convention, and have left their crosiers sticking in the earth. Do you suppose they ran away from us?"

The pine-barrens of New Jersey are a fertile field for the zoölogist, the botanist, and the microscopist, to say nothing of the poet, although, to judge from exoteric signs, the poet is getting scarce. But the botanist comes here, while the zoölogist and the microscopist are not unknown.

For the botanist the region is a neutral ground where the Northern and the Southern flowers meet and fraternize. For the zoölogist, perhaps, the locality is not so plentifully supplied with rarities that stir his anatomical proclivities; but here the microscopist may be sure of finding many objects in the water, if not on the land, which have never yet been seen by mortal eye. And when such occur, they exist in the greatest profusion.

In my permanent domiciliary habitat, a certain fresh-water alga (*Conferva bombycina*) occurs rarely and in small quantity; but in the pine-barrens it floats on the water of the cranberry-bogs in great sheets; as the water recedes, it dries into a substance like tissue paper and drapes and festoons the ditches. Its filaments were more profusely sprinkled with the empty loriceæ of dead infusoria than I remember ever to have seen, the species many, and, by the pressure of the interlacing algæ, so deformed into a remarkable series of crooked sheaths that there seemed to have been a contest of growth between the infusorial animals and the algæ, with a victory for the plants.

A row of obconical pitfalls of the antlion larvæ borders the path, but when Polly sees the terrible mandibles of the one which I disinter, she vows the sun is setting, and that the time has arrived for us to go to our temporary home.

A whippoorwill was sitting on the fence; I greeted him with joy even as he hurled himself into the twilight. Presently he returned, and Polly's murmurs about a snake as big as a tree were lost in that melodious ballad of grief with which the forest softly echoed under the moonlight.

THE STURDY "PRAIRIE-CHICKEN."

By H. S. Canfield.

FAR ahead of the men in the four-seated farm wagon, and standing like a line of lead pencils against the horizon, is a row of cottonwoods, marking the sinuous course of a shallow stream. On every hand, billow after billow, rolls a sea of grass, broken here and there by islands of corn. An occasional farm-house sends a spiral of smoke upon the air of early morning. The road runs straight, hard, brown, and dusty. It is hub-deep with mire in the January thaw, but just now the unshod hoofs of the horses ring on it.

Over the eastern edge of the grass-land is a red rim of sun. The sky has been unspotted by cloud for a week, and the weed-clumps rustle aridly, for it is a dry country, where little dew falls. Though the month is September, there is a hint of frost. In the Northwest, winter comes early and stays long.

On each side of the road two dogs are quartering. There is a liver-hued, double-nosed gyp named "Venus," because she is the ugliest animal in the world; a liver-and-white pointer male, and a brace of lemon-and-white setters. In the wagon is a keg of water for them. When the sun gets high and refracted heat rises from the earth in waves, the

pointers will run the setters off their legs. But when the line of cottonwoods is reached and attempt is made to invade the tangle of briers in quest of hiding birds, the pointers will suffer horribly. In a quarter of an hour they will be a bloody red from nose to tail-tip, and will creep whining to the heels of their masters, while the lemon-and-whites will gayly breast the thorns. So, in the wagon on the Nebraska prairie, and in cities, and at

cross-roads, the dog argument goes on, with vociferating men red in the face, and no appreciable advantage to either side. I am a pointer man, but I keep it to myself when a setter man is around. One lives longer that way, and saves flesh.

The men in the wagon pay no attention to the undersized horses; they know enough to keep in the road, because it is harder pulling on the grass, but four pairs of eyes are fixed



The "Prairie-Chicken"

on the dogs. Suddenly "Venus" stops, her legs rigid, her tail tense, and quivering slightly at the tip, her nose within three inches of the ground, her head slewed far around to the left, her wide nostrils flaring, her golden eyes glowing like coals. It is a "button-hook point." The other dogs, fifty, seventy-five yards away, pause instantly. True to lineage

and training, they are "backing." The gunmen pile out into the road, anyhow. It is their first day and they are keen. Each dives into the right-hand pocket of his canvas coat, extracts two shells, and there is a simultaneous click of barrels dropping down, then closing.

With a rush, a roar, a mimic thunder of beating pinions, twenty prairie-chickens are in the air, flying straight, as the arrow flies, and with the arrow's speed. They have sprung ten feet straight upward, and woe to the man with the crooked stock, for he shall shoot under. Eight rapid reports shake the air, and three plump bodies strike the ground. The men look at each other a little blankly. Such shooting is nothing to boast of. It is, however, their first day out, and the first shot of it. They will do better later on.

A hundred yards away a member of the darting covey lags. Its legs droop weakly; its velocity lessens; it wabbles from side to side; its companions have left it far behind; it has been hit. Life quits it suddenly while in flight, and it pitches downward, sideways. The furthest dog, a setter, is told to retrieve the strayed bird. The bodies are dumped into the wagon. The covey has flown a half-mile, and there is no attempt to follow. Thus early in the season they are plentiful. It is cheaper and more remunerative to pursue the road. Later on each flock will be hunted for miles.

The size of a prairie-chicken depends upon whether the observer has, or has not, a gun. If he is unarmed, the bird is nearly as large as a turkey; if he is armed, it is but little bigger than a quail and flies faster, as well as more erratically. An unarmed man is unable to understand how it could be missed. It hides half the sky-line. When he looks over the barrels, however, it is only a buzzing bit of brown, given to sudden strange rises and falls, or in- or out-shoots. Then shot have a fashion of patterning so widely that they hum on every side of the quarry without touching it. The powder is too quick or too slow. We have all had experience of the weapon which is ordinarily all right, but pulls very hard on the trigger in moments of emergency. There is also the over-eager dog, and the solitary bush, the only one in miles, which swings abruptly between one and the vanishing birds, and the base-instincts

chicken which comes straight back over one's head, and the miserable tuft, or clod, upon which the heel slips just as the stock touches the shoulder.

Why is it that when ten fowls rise and they are a solid wall save for an open space in their center, which is not two feet in diameter, and both charges go into the center of this circumference—why it is that a load of No. 8 shot, containing 495 pellets, will rip along the back, and rip along the belly, and get off a hatful of feathers, and leave the triumphant cock unskinned? Why is it that when you make a particularly atrocious miss there is always some fellow steadily gazing at you, who ought to be busy marking his kill; and why is it that his silence is a thousand times more exasperating than if he rolled upon the ground in laughter? And why is it that one clean kill of a crossing chicken at fifty yards, going down wind, or one smart double, will wipe out every memory of previous failures, and cause the man behind the gun to throw out his chest and smile fatuously, and look as if that kind of execution were an hourly matter with him? These are all unexplained, inexplicable, things of the field, and they go to make up its agonies and alleviations.

In most of the Western and Northwestern States prairie-chickens have been rigidly protected for some years past, and the result has been a steady increase of their depleted numbers. The shooting season has been shortened to three months, and game-wardens are active. Of course, there is still market-shooting and the birds are still shipped to the cities in barrels marked "pork," or "eggs," or "potatoes," or anything which happens to strike the shipper's fancy. It is estimated that in Nebraska alone 25,000 of the flyers will be slain this season. That, however, is only a tenth of the slaughter which was annual a decade back.

So hardy is this bird, so fecund, so industrious, so competent to cover great distances in search of food, and so wily in self-protection, that it asks only half a chance to hold its own. Floods, droughts, blizzards, and hot winds are alike powerless to exterminate it. Cut down in one winter by a mortality exceeding sixty per cent., in the next spring the long-drawn hoot of its challenging, or wooing,

male sounds from prairie and thicket, and in the autumn the undepleted coveys surge upward from every section of uncultivated land.

A braver, sturdier fowl does not live. The tenacity with which it hangs on amid inimical conditions is sometimes little short of the marvelous. Crawford County, Wisconsin, on the east bank of the Mississippi, has been settled for fifty years. It is one continuous farm, with only here and there bits of woodland. The holdings are small and the houses a quarter of a mile apart. Yet there are prairie-chickens still in Crawford County, many of them, and this is a bird which, unlike the quail, is not fond of mankind, and does not prefer cultivated ground. It has many enemies—foxes, wild-cats, minks, pole-cats, weasels, and snakes—but it outbreeds them all, and continues to increase in spite of them. Formerly it suffered much from hawks; but as the West has grown populous the gun of every farmer has been turned against the hawk, and the miniature eagles have become scarcer and more scarce, until now they are not so strong a factor of destruction.

Throughout the Northwest the prairie-chicken pairs early in May. As its habitat extends, however, from the Canadian line to the Gulf, there is wide divergence in this respect. In the level country above Houston, Texas, the young are shootable during the first week of August. In Nebraska there is no nesting before May. The chicks are hatched in June, an average of ten to the brood, though a family will sometimes number twenty. They grow with rapidity, and two weeks after emerging from the shell are able to care for themselves with but slight assistance from the mother. By September they have reached nearly to full stature. They are then as swift of wing as they will ever be, though not capable of so prolonged flight as later.

The mother, during the infancy of her offspring, is extremely faithful to them, and will do battle readily against a prowling fox or skunk. In common with all members of the gallinaceous tribes in a wild state, she has the pathetic trick of pitifully simulating a broken wing when danger threatens her dear ones, and she does it well.

She is not assisted by the male in any manner after love-making is ended. He

will not feed her during incubation, nor take her place upon the nest when she is hunting for food. He hangs about, pretending devotion at this period, but it is faith without works. When the chicks appear he becomes a rover and so lives until the autumn, when he joins some covey, most probably not his own, and so passes his years until his inevitable ending, which is death by violence.

The prairie-chicken rears but one brood in a summer. It is monogamous, but a comparative scarcity of males does not affect the crop. The rovers visit other impressionable kinswomen. This monogamy from choice and polygamy from necessity obtains whenever the females outnumber the males. Knowledge of this fact leads many shooters to slay the males by preference. The markings of the sexes are distinct. It requires, of course, a quick eye to pick out the cocks in a rising covey, but it can be done readily with a little practice.

Of late years sportsmen have taken to the use of the 16-gauge against the chicken. They do this not because the smaller gun is more effective than the 12-gauge, for it is not, nor because it is so effective as the 10-gauge, but because it is lighter, is handled more quickly (a desideratum in long rises), and is not so much of a white man's burden on a hot day. The difference between carrying 100 12-gauge shells and 100 shells of 16-gauge is noteworthy. Furthermore, the 16-gauge is of so small bore that it does not call for choking, and the ends of the barrels are not shot out so soon; they do not lead as readily, and the weapon has a more artistic appearance.

In September, No. 8 shot, chilled, backed by two and a quarter drams of good powder, smokeless or black, will be found a sufficient charge; but as the days get shorter and colder the birds begin to put on their heaviest coats of feathers. They become stronger of muscle, harder of flesh, more wary, and they rise at greater distances in front of the dog. In November, No. 6's, in front of as much explosive as the shoulder will stand, will be found more satisfactory. In November or December, prairie-chicken will carry in comfort a great amount of lead, and even when hit to death will often cover a half-mile before falling.

As the birds grow older, too, they de-

velop a much greater flying capacity. From a half to a quarter mile is far enough for them at the season's opening, but two months later they will habitually go a mile and sometimes two miles before alighting. Just how far a prairie-chicken can fly when doing its best has not been ascertained. There is an authenticated instance, however, of one covey of five which had been much shot over, that sprang fifty feet in air, went down wind, and pitched four miles away. That kind of bird is discouraging. The tribe owes its preservation, in fact, to its ability to cover great distances, either on foot or on the wing, in search of food or in avoidance of danger.

In centuries of fighting for its life against myriad foes, the prairie-chicken has developed the sense of caution abnormally, as well as a coat that is a marvel of protective coloration. It lives in the open for the most part, and feathers which match exactly with its surroundings are a necessity. In the workings of nature they have gradually changed in hue until now they are of a piece with the landscape at the time of year when the bird is most sought.

Once, upon a prairie in Southern Nebraska, a prairie that was wind-blown and almost as bare as the palm of the hand, a prairie which, apparently, did not afford enough cover to hide a wren, a dog came hard down in a sudden point. It was a good dog, and its owner was willing to back its nose against his eyesight. He could see no sign on the brown table in front of him, though he stood for a full minute, letting his eye travel back and forth for a distance of ten feet, going over the surface inch by inch. He was nearly ready to confess that the setter for once had "lied," when he caught the glitter of a small black bead, twenty feet away, directly in his front. That was the eye of a prairie cock, watching intently. The bird was squatting with its tail toward the hunter. Under it was a small depression, and its back was level with the dark brown earth, with which it matched exactly. Two spears of reddish grass, an inch apart and not thicker than a straw, curved above it, and on the stalks were a half-dozen narrow blades. They, too, were of a reddish brown, blending with

the neck and wing feathers. The mottled breast, of course, was hidden. The hunter on this occasion had only a camera. He snap-shotted the dog and the ground, and it made him a puzzle-picture, which it amuses him to show to friends and ask them to find the bird.

When frost cuts down the cover, the chicken, if peril is near, develops a desire to get up and get. It is on business from the moment its wings lift. It comes to depend less and less on hiding, and more and more on keeping out of range. It is often so that a covey will lie stilly to the dog, but will flush at fifty yards from the advancing man. In such cases, if the gunner should have goose-shot in his cartridges, it will be all the better for him. The person who makes a decent bag late in November will know that he has been shooting. He will know it not only from aching muscles, but from the size of the bill he will have to pay.

Gone are the autumns when it was possible to throw a gun over the shoulder, whistle the dog, walk out for a mile or two, and down a dozen in a short forenoon. Gun licenses, licenses to shoot, dog licenses, vehicle-hire, luncheon, ammunition, all figure up a pretty total. He is a remarkably economical "gentleman sportsman" who can shoot prairie-chicken at less than one dollar per head, not counting his time as of any value at all. The labor of it is of less moment.

Nowadays, chicken-hunting, by sensible people, is largely done from a wagon. The quarry is not numerous enough to make its pursuit wholly on foot a thing of joy. The team sticks to the road, and the bipeds make short excursions to right or left. It is true that a man's liver is well shaken up by constant jumping out and climbing in. He breathes many cubic feet of powder-smoke, which is healthy and destroys that feeling of not wanting to drink anything. The air, until the sun makes it a furnace, is like champagne. The harness jingles merrily, there is much talk and laughter; the leaping dogs, which will be required to do sixty miles by sundown, are poems of motion. There never was a luncheon which bulked big enough at the noon-hour after such a morning's hunt, and it is all well worth while.

OLD KENTUCKY AND THE THOROUGHBRED.

By Robert Wickliffe Woolley.

BREEDING the thoroughbred was for years a luxury in the Blue Grass region, then it became a business, and now it is the most important industry there. The Kentucky gen-



Copyright by Ernest Marx.

Major B. G. Thomas, Kentucky's Oldest Breeder.

tleman was rich and he raced for the glory of winning; the civil war first caused him to breed and race more for money; recent reverses of various kinds have further hampered him financially, and now he is being supplanted as a breeder by the New York millionaire.

The early settlers of Kentucky were largely Virginians, Carolinians, and Englishmen who were turfmen by heredity and choice, and they took a number of thoroughbreds over the Wilderness road into the Blue Grass country. These horses

were frequently used for hunting as well as for racing, but few of them were, even for that day, of particularly high racing class. However, they were good individuals, and were rich in the blood of Godolphin Arabian, the White Legged Lowther Barb, and several other noted beginners of choice pedigrees. In those days every owner of a mare or stallion kept his own record; there was no stud book, such as Bruce's, in which to register, and the science of breeding was not known or practiced as it is to-day. The first colts foaled in this beautiful western county of Virginia caused their owners to enthuse, and in due time the Blue Grass and limestone water were credited with being the greatest of stamina and muscle givers.

The fame of the new breeding grounds went back across the Alleghanies and Cumberlands, and more thoroughbreds were imported from the Eastern States and from England. Among these were a number of the get of Diomed, winner of the first English Derby, run in 1780, and brought over to Virginia in 1799, when he was twenty-two years old; and of Diomed's noted son, Sir Archy, one of the greatest race horses that ever faced a starter. Sir Archy sired Timoleon and he begot Boston. The latter was regarded as the speediest and the gamest thoroughbred the South had produced up to that time, and on May 10, 1842, he met Fashion, the Queen of the North, in a famous four-mile match race over the Union Course, Queens County, L. I. Ten dollars admission was charged to the quarter stretch, and it was estimated that between 50,000 and 75,000 persons saw the contest. Fashion won in straight heats. Boston was taken to Kentucky and there he sired Lexington, the King of American stallions.

This was early in the ideal period in the history of the Kentucky thoroughbred. It began practically with the Grey Eagle-Wagner contests, and those between Lexington and Le Compte were decided well toward its end. The two races in which the first-named horses met were run at Louisville in the fall of 1839. Wagner, Louisiana's representative, beat Grey

Eagle, Kentucky's representative, both times, and in the second event broke down. He had won the first heat, and the accident came in the third. It is related that strong men and beautiful women wept when Grey Eagle limped past the stand.

Lexington and Le Compte waged their famous battles on the course of the Metairie Jockey Club, New Orleans, in 1854 and 1855, and Kentuckians were as much interested as if they had taken place at Louisville or Lexington. Le Compte won once, and Lexington twice. Hundreds of thousands of dollars, whole boatloads of cotton, and droves of mules are said to have changed hands on the results. Lexington startled the turfmen of two continents by reducing Fashion's record for four miles, $7.32\frac{1}{2}$, to $7.19\frac{1}{2}$. His second victory over Le Compte closed his turf career, and his owner, Richard Ten Broeck, Esq., took him to England.

While these and other great races were taking place abroad, the Kentucky breeders were holding high carnival twice a year on their course at Lexington. In 1828 they founded the Kentucky Asso-



From an Old Painting.

Imp. Glencoe.

ciation and constructed what is now the most historic track in America. It is still used for training purposes. The old Association went out of existence several years ago, the great tracks of the East and North making high-class racing at Lexington a costly undertaking. But stakes worth millions will never give the latter-day race-courses the prestige enjoyed by this one for at least fifty years. The Kentucky Association was officered by Henry Clay, Gen. Leslie Combs, Gen. John C. Breckinridge, James B. Beck, and many other men of national reputation. Before the civil war, and for several years after-



Ashland, the Homestead of Henry Clay.



The Famous Lexington Race-Course.

ward, the youngsters bred in the Blue Grass ran their first races as two-year-olds and three-year-olds at Lexington, and proved their right, or inability, to leave home to battle with the cracks of other States.

It was on this track that the late John M. Clay, youngest son of Henry Clay, startled a large and fashionable crowd of spectators by running, almost wholly unclad, past the grand-stand in search of his trainer, who, he heard, had instructed a jockey to pull one of the Clay horses. On another occasion, Mr. Clay became satisfied that his trainer was dealing unfairly with him, so he shouldered his rifle and started for the stable on his farm near Lexington. The hunted man was warned and took to a woodland near by. Mr. Clay followed and the chase was kept up for several hours. The trainer was not hurt, but a score or more of trees were barked. Not until ammunition was exhausted did the hour for explaining arrive. The sturdy old gentleman loved a thoroughbred with all his heart, and with him honesty was almost a mania.

It is an undisputed fact that Kentucky mares have made reputations for twice as many stallions imported from England as have the mares of all other States combined. This is particularly true of *antebellum* days. After Diomed, the greatest thoroughbred brought to America prior to 1860 was Glencoe. He was first taken to Mobile, and a few years later became premier stallion at Blue Grass Park, near Georgetown, the breeding establishment of the late A. Keene Richards. As a sire of speed he was a brilliant success, but as a sire of sires and of dams he will be known so long as there is a thoroughbred horse. Glencoe's prepotency becomes more marked every year. He is a grand-sire of Stockwell, known as England's emperor of stallions, and nearly every racer of note in America to-day traces to him.

Glencoe's most noted daughter, Magnolia, was presented to Henry Clay in the late forties by Dr. W. N. Mercer, of New Orleans, and she became the pride of the Ashland stud, then just started. The old Commoner was too busy with affairs of



Club House and Grand Stand of the Old Lexington Track.

State to devote much time to his breeding establishment, so the management devolved on his son, John M. Clay, referred to above. There was never a large number of mares and stallions at Ashland, but the quality of every animal was the best. Magnolia shares with Levity the honor of being the greatest of American brood mares, and her stud mate, Margaret Wood, is hardly less noted. Iroquois, the only colt bred in this country that ever won an English Derby, was the son of Maggie B. B., a granddaughter of Magnolia. She was the dam of the late August Belmont's fast horse Kentucky; also of Daniel Boone, Magic, and Madeline. On the death of Henry Clay his thoroughbreds became the property of his son. The latter always said Daniel Boone was the most intelligent race horse he ever saw.

"The morning after he was foaled," said Mr. Clay, "I strolled out to the pasture to look him over. The little rascal spoke to me if ever one man spoke to another. He pricked up his ears and cocked his head to one side.

"'Marse John, here I am; will I do?' he asked.

"'Yes, by God!' I answered, 'you will do.'"

Late in life Mr. Clay was asked by the Church to give up racing his thoroughbreds. He was thinking seriously of becoming an Episcopalian, and was told that he could breed horses and sell them, but not campaign them.

"Crawford belongs to your church," he said to the minister, "and if he can speed to heaven behind a trotter, I can beat him in on a thoroughbred."

John M. Clay died a few years ago, and his stud is still intact, being conducted by his widow. Nearly all of the mares are descendants of Magnolia or Margaret Wood.

Old John Harper, a victim of the famous Harper tragedy in the early seven-

ties, James K. Duke, Gen. Abe Buford, A. Keene Richards, and Dr. E. Warfield were noted as breeders and turfmen before the war, but the leader was the late R. A. Alexander. Although born in America, he was a Scotch peer, and many of his friends called him "Lord Alexander." He disliked the title, preferring plain "Mister." His estate, "Woodburn," in Woodford County, covered 4,200 acres of Blue Grass soil, and he was one of the richest men in the South at the time of his



From an Old Painting.

Lexington.

death, December 1, 1867. He led the life of an English gentleman, and so lavish and imposing were some of his entertainments that the negroes for miles around thought he must be superhuman. They referred to him as "Great Gawd Alexander."

The Master of Woodburn did more to improve the Kentucky thoroughbred and towards finding out causes and effects in the breeding problem than all of his contemporaries combined. He was a sportsman through and through, and breeding horses was his hobby, his life's study. He sent the late Nelson Dudley to England in 1856 to bring Lexington back to America, Mr. Ten Broeck receiving \$15,000 for the horse. The great four-miler was then stone-blind, and many Kentuckians regarded the price as excessive. Mr. Alexander said he would sell one of Lex-

ington's get for a greater amount. In the early sixties he made good his prediction, Theodore Winters, of California, purchasing the unbeaten Norfolk for \$15,000. Mr. Alexander was offered \$15,000 for Asteroid, another unbeaten son of Lexington, but declined to sell. Norfolk became famous as a sire, and Asteroid was a failure. Lexington lived until 1875, and has proved the most prepotent of sires, not even excepting Glencoe. Tom Bowling, Norfolk, Duke of

ians to another for many years to come.

Adjoining Woodburn is Nantura, the home of the Harpers. There, Longfellow, the leading sire of recent years, and Ten Broeck, who reduced Lexington's four-mile record to 7.15½, and the mile record to 1.39¾, were bred and died. Longfellow's performances were the turf sensations of the early seventies, and Ten Broeck swept the boards in the latter part of that decade. Their names are household words in Kentucky, and many a re-

tired Blue Grass turfman will tell you over his julep that the horses of to-day do not compare with them. There are thousands who can describe to you how Longfellow finished on three legs in his last famous race with Harry Bassett at Saratoga, and how Molly McCarthy is running yet in her match with Ten Broeck at Louisville in 1877.

One of the most picturesque of the old-school turfmen was Gen. Abe Buford, whose Bosque Bonita stud, between Versailles and Midway, was only a little less famous than Wood-



McGrathiana.

Magenta, Asteroid, Kentucky, Salina, Idlewild, War Dance, and a host of other noted animals made his fame as a begetter of race horses, and Hindoo, Salvator, Luke Blackburn, Foxhall, Sensation, and Elias Lawrence are a few of the produce of his daughters. Lexington mares were for thirty years the most sought after of thoroughbred matrons, and his blood now flows in the veins of nearly every American-bred race horse of note in this country and England.

R. A. Alexander died at forty years of age, leaving his entire estate to his brother, A. J. Alexander, the present Master of Woodburn. The thoroughbreds were sold off several years ago, and the stud has passed into history, but stories of its horses and its founder will be handed down from one generation of Kentuck-

burn. Imp. Sovereign died there in 1862, and thirty years ago it was the home of Imp. Leamington, and of his noted son Enquirer. The one was becoming famous as a sire and the other as a race horse. Gen. Buford was a good liver and entertained extensively. Time wrought its changes. The old gentleman lost his money and estate, became a temperance lecturer, and finally a preacher.

Probably the most interesting experiment in breeding ever made in Kentucky was that of the late A. Keene Richards, of Georgetown, with the Arabian and the thoroughbred. He reasoned that, inasmuch as the richest pedigrees all traced to the Arab, therefore the desert horse must be as speedy and game as the highly bred and delicately proportioned animal of England and Kentucky. It cost Mr.



Old Barn in Dixiana in which Domino and other Famous Thoroughbreds were Foaled.

Richards many thousands of dollars and resulted in dire failure. As far back as 1850 he imported the best specimens that money could buy, and continued the experiment for nearly thirty years. The hybrid was a thing of beauty, but in speed, poetry of motion, and stamina it was far inferior to the thoroughbred. No breeder to-day would risk the cross in trying to produce a stake-winner.

Keene Richards is another household name in the cabins of Central Kentucky.

There was considerable pomp about his estate, Blue Grass Park, and his hospitality was so noted that the negroes thought his first name "King." The old "Uncles" and "Mammies" pass many a pleasant evening before log fires going over the good days of long ago and telling how "King" Richards's horses ran so fast that their feet never touched the ground.

Another interesting personality was the late H. P. McGrath, founder and owner of McGrathiana, near Lexington.



A Cold Day for Youngsters.

He bred and raced Tom Bowling, Aristides, and others, and never tired of glorying over the victories of his horses. Tom Bowling was his pride, as well as of thousands of other Kentuckians. McGrath's love for the great horse was deep-seated. He treated him as if he were a king, and entertained hundreds of friends in his honor. Tom was once slightly injured in a railroad wreck, and, it is alleged, his devoted owner refused an offer of \$100,000 for him from the railroad company. The late B. G. Bruce, a turf authority of note, told the writer he once saw Tom Bowling run the third quarter on a mile track in 19½ seconds, a performance that no other horse ever approached.

Price McGrath was not an aristocrat, but he had a wider acquaintance among Kentuckians of high degree than any other man in the State, and his hospitality is still talked of in the Blue Grass and by the older horsemen throughout the country. John C. Breckinridge, Gen. James F. Robinson, "Vick" Glass, A. Keene Richards, John George, Calvin C. Morgan, and others as well known, were his intimates. McGrath was a gambler by profession, but nothing of the profession ever contaminated the atmosphere of McGrathiana.

A noted estate near Lexington twenty years ago was Walnut Hills, owned by the late James A. Grinstead. Here the door was always open, and visitors were entertained when the Lord of the Manor was at home, and when he was abroad. It is



Hanover and Milton Young, of McGrathiana.

famous in turf history as the home of Gilroy, Waverly, etc., and as the birthplace of Grinstead, the noted California sire, and numerous high-class performers of a quarter of a century ago.

This brings us down almost to the present, when all too little of the old-fashioned ideas of honor and gentlemanly demeanor are to be found on the turf. Major B. G. Thomas, whose Dixiana stud was famous thirty years ago, and is to-day, is the one connecting link between the days of Boston and Lexington and the



From an Old Painting.

American Eclipse.

present. He saw the Wagner-Grey Eagle contests in 1839 and has witnessed most of the classic events since then. The Major is a fine type of Blue Grass gentleman, whose gray soft hat and flowing snow-white beard are as familiar at Sheepshead Bay or Morris Park as on the streets of Lexington. He bred Herzog, Himyar, Domino, Correction, Ban Fox, King Fox, and more than a hundred other noted stake-winners. A few years ago Dixiana Farm passed to Major T. J. Carson, a gentleman and ex-Confederate soldier from Mississippi, who keeps up its reputation for hospitality. But Major Thomas continues to raise thoroughbreds, at Hira Villa, near by, and is looked up to as the patriarch of the breeding ranks.

He who has known life on a stock farm in the Blue Grass region of Kentucky counts himself fortunate. He has roamed over broad meadows, lounged on the velvet-like turf, and reveled in the shade and fragrant air of beautiful woodlands. In the spring season he has watched mares, thoroughbred and trotting, grazing leisurely while their foals of a few weeks scampered and gamboled like so many lambs; he has seen these colts weaned, halter-broken, and a year hence led away to the auction ring. Many a June day he has tarried awhile at the

in the cool of an evening, and listened to stories of the achievements of horses bred on that farm. The Lord of the Manor has entertained him for hours with reminiscences of the good old days of the turf, when racing was for love of the sport. He has ridden after hounds in late summer and autumn, and remembers their yelping, breaking the stillness of the night or early morning, as the sweetest music that ever tingled in his ears. Often on the hunt the party selected a bit of high ground for a brush-wood fire, and he gladly hugged it at a respectful distance while the dogs made merry on the circuitous trail of the wily fox. Before this fire he has heard a little of the excellence of Bulger, Red, Jack, or Sport, and much about Lexington, Longfellow, Tom Bowling, and Hindoo.

These are the days of the New Yorker in the Blue Grass. The late M. H. Sanford, for years a noted turfman, was the first to go there. He formed the Preakness stud, with Virgil and Imp. Glenelg as the heads of the harem, and his annual sales of yearlings were important events. He sold out early in the eighties to Daniel Swigert, who changed the farm's name to Elmendorf. It is the birthplace of Tremont, Firenzi, Salvator, Señorita, Los Angeles, and many more noted



Feeding Weanlings at Dixiana.

base of a wide-spreading oak or stately sugar-maple, nibbled the tender ends of blue grass stalks, and, dropping off to sleep, pictured himself on a great race-course, cheering a brilliant victory of the young thoroughbred then rollicking near its dam only a few yards away. He has sipped a julep and puffed a corn-cob pipe

turf performers. For a number of years Swigert's yearlings brought more per head at auction than those of any other breeder. Elmendorf is now owned by J. B. Haggin, of California and New York, who is making it the most magnificently appointed estate in the South, and stocking it with the most costly of thoroughbreds.

After Mr. Sanford came the late August Belmont, with his Nursery stud. This stud had been located near Babylon, L. I., for nearly twenty years, but Mr. Belmont was not entirely satisfied with results, so mares, stallions, and young stock were removed to the Sutton Farm, near Lexington, in 1885. St. Blaise had just been brought to America, and his success as a sire in Kentucky was immediate and brilliant. La Tosca, Potomac, Her Highness, St. Carlos, Clarendon, and



Chesapeake were a few of the first crops of foals by him. On the death of Mr. Belmont, his son, August, took the farm, but allowed most of the mares and stallions to go to others, St. Blaise bringing \$100,000 at auction. Henry of Navarre is now the premier of the stud.

James R. Keene's Castleton is an extensive and beautiful tract, and harbors Ben Brush, Kingston, Tournament, and Chorister. Domino, the peerless two- and three-year-old of a few years ago, spent his last days there and is buried at Hira Villa. It has been estimated that the breeding stock at Castleton cost a quarter of a million dollars.

W. C. Whitney is the latest of New York millionaires to enter the ranks of Kentucky breeders. His \$49,000 stallion, Meddler, Lissack, and fifty mares are at La Belle Farm, near Lexington. Perry Belmont, E. C. Cowdin, A. H. and D. H. Morris, and O. H. P. Belmont are other New Yorkers who have thoroughbreds in the Blue Grass region.

It is not intended to deal with the Ken-

tucky breeders of the present in this article, but a passing notice is in order. Milton Young, the owner and proprietor of McGrathiana, has the largest establishment in Kentucky, and is the second biggest breeder of thoroughbreds in the world. He it was who refused \$90,000 for Hanover and lost him by death a few weeks later. Mr. Young had Onondaga blinded with hot irons, because he was a man-eater. Humane societies all over the country censured him, but the wisdom of the act has since been amply proven. Fully a dozen stallions are always kept at McGrathiana, and the produce of the mares are sold as yearlings, as are those of most other big breeding establishments in Kentucky, nowadays.

Runnymede, owned by Clay and Woodford, and situated near Paris, is the home of the mighty Hindoo and Sir Dixon, and the birthplace of Hanover, Miss Woodford, The Butterflies, Raceland, and other great ones. Hartland, near Versailles, the property of J. N. Camden, Jr., is a beautiful old farm that was noted a half century ago as a thoroughbred nursery, and in young hands is regaining its lost prestige.

Sad is the story that many an old and middle-aged Kentuckian has to tell to-day of fortune lost in breeding and racing. He tried to make them pay, as well as furnish sport, and failed. A few raise and sell yearlings at a profit, but the great majority do not. Some have tried to produce superior racing animals from mediocre parents, but couldn't; others have stuck to strains of blood long since proven worthless, and forfeited their farms as a consequence. There has been a severe weeding-out in the breeding ranks of the old State in the last decade, and few Kentuckians now figure prominently. New York's millionaires are crossing England's best with the cream of the Blue Grass, and raising the thoroughbred is once more becoming strictly a rich man's game. More yearlings were sent to the Eastern markets in 1900 than in 1899, and, doubtless, there will be more in 1901 than this year, but only superior individuals with rich and fashionable blood lines will command high prices. The old Kentucky breeder is passing, the romantic is dead; but the thoroughbred horse is more in demand and nearer perfection to-day than ever before.

HOW A TROUT BROKE A FRIENDSHIP.

By Frederic Remington.

IF I were an angler there would be no story, but I shall wish all my days that I had been a fisherman when I think of how my lack of experience refrigerated the nature of my old friend Joel B——.

It was early spring in Canada, and Lake Edwards was ice-water. I was camped on a point of rocks in company with three "Complete Anglers" and three French-Indians. A chilling rain had fallen incessantly for days—the fish would not be suited by any fly in our books. Everything was soggy and mildewed. An ill-tempered little box-stove smoldered, and helped Mr. Walker's creation to keep our miserable bodies alive. Our minds were becoming jaded by a draw-poker game which seemed to have had no beginning. As I view the situation from afar, I can perceive how carefully tilled was that ground to bear the seeds of trouble.

They were all friends of mine, with strong mutual sympathies in many directions; but they were fishermen, while I was not. They were men who at home have sacred dens in their houses, and in them they worship a heathen god in the form of a glass case full of dainty rods. They have hundreds of flies, suited to all kinds of moods of all kinds of fish. They have stuffed bass and wadded trout, colored artificially as falsely as a rose on Indian trade calico. There are creels, reels, silver ammunition flasks, rare prints of the forefathers of the lure, books of tall stories so dear to the craft, and things which you and I could not call by name.

In such places these men gather—through the tobacco smoke the lakes blow softly, the ponds wait idly, and the brooks bubble pleasantly in imagination.

These fellows mix fish up with their dessert and coffee, and in importance to them old Leonard is to President McKinley as a million to one.

So things to fish with to these men, things of wood and silk and steel, are invested with souls almost. They are like Japanese jugs or early English portraits to other enthusiasts.

The trout of Lake Edward floated idly beneath the boats, and if they looked at our bait they did no more, in consequence of which the anglers sat on boxes and dealt five cards round on the top of a trunk, and stub-flushes took the place of "cockie-bondhus" and "yellow sallies."

Having been ruined by the last "jack-pot," I got up and trod forth into the rain, which was beating the lake into silver. I was listless—tired of the eternal "three-card draws"—tired of the rain and dreaming of elsewhere. I sauntered down towards the water and passed a shed under which were hung a great number of rods, all strung with reels, lines and flies.

"Why not fish—we came here to do that—that was our theory? Suiting the action to the thought, I took down a rod at random, called a Frenchman, and got into a boat.

We two sat there, the guide holding us a short way from the point of rocks. The rain poured in jumping drops on the flat water, while the pine forests faded softly into its obscuring sheets.

Presently one of our party, a gentleman from Pennsylvania, who must have encountered a disappointing "jack-pot," emerged from the tent, and, calling a guide, began to cast from a boat not far away.

The poker game evidently languished, since the capitalists came out in the rain and gazed about in a yawning way. They geyed Mr. Pennsylvania and me, who am no fisherman. Then they espied a bark canoe which was one of the "quickest" boats I ever saw. They remembered having recently seen an Indian stand upright in the tottlish craft—a balancing feat which was the inherited trait of ages of canoe-living ancestors. This inspired a five-dollar sporting proposition that one of them could do what the Indian had done. He pushed out in the canoe, while my friend Joel B—— stood on the rocks amusing himself with the thought of the easy five dollars.

At this point my rod doubled into

something like a figure eight, then it acted like a whip-snake having a fit—it was near to parting from me at times—the reel sang and the line hissed about in the water. The Frenchman stood up in the boat and poured Lake St. John French into me in a Maxim rumble. While this was at its height, Mr. Pennsylvania hooked the mate to my whale, but he knew his business. There was a great splash in front of me, and I only glanced long enough to see that Joel B—— had won his bet.

Joel—he of the rocks—tipped backward and forward, laughing until the forests echoed with his roars. Things were all his way.

The swimmer tried to board Mr. Pennsylvania's boat, but was told to get away—not to bother his fish—that human life was nothing now—to "swim to the rocks"—"don't be a d—— fool."

The Cannuck French of my guide was beginning to tell on me. I was almost willing to let the fish go while I threw the Frenchman overboard. I was so hot at him that I grew cooler toward the fish end of my troubles, and no doubt was doing better reel work for it all.

Events having slowed down a bit, Mr. Joel B—— began to observe things more closely. As he ran his eyes curiously over the activities on the water, they alighted on my rod. He gazed hard, earnestly, knowingly, at my rod. It was now in a figure eight, now bent this way, now that, being pulled half under water, and Joel B—— raised both hands high above his head while he yelled "—— ———, you have got my rod—my seventy-five-dollar Leonard rod! Cut that line, —— ———! What in —— do you mean by taking my best rod, —— ———?"

The Editor will not let me tell you all that Joel B—— vouchsafed on this galling occasion.

Now my affrighted friend walked the rocks like Mrs. Leslie Carter in the third act of "Zaza." He nearly turned hand-springs; he gesticulated and roared for a boat or a deadly weapon. Steadily through it all surged his quick-chosen words of rebuke to me.

I now regretted the whole thing, but I

couldn't let go, and the fish wouldn't. The seventy-five-dollar bamboo was getting action for the money, and the Frenchman knew that war had been declared.

Seeing that his present methods would never get the rod ashore without the fish, Joel B—— changed his scheme quickly, as an able tactician should. He stood still, and, beating like the leader of an orchestra, he said: "Reel him in—slowly, now—slowly—slowly. There—let him out—don't hold that rod against your belly, —— ———!"

There were tears streaming from the rod-owner's eye which rivaled the rain.

"Can't you check him easily—there now! Do you think you have got a bean-pole, —— ——— Easy—don't get excited! Baptiste, back that boat ashore."

"If you back this boat ashore I'll murder you! By St. George, I'll burn you alive, Baptiste!" I shouted, and nothing was done.

Joel coached, more carefully now—more intelligently—and my divided interest in the trout cooled me down until, under able direction, I finally landed a five-pound trout on the rocks, and I was no fisherman. It was one of the mistakes of my life.

Joel B—— took his rod amid my apologies. He cared not for the latter. It was not the seventy-five dollars. It was that the clumsy hands of a bean-pole, worm-baiting, gill-yanking outcast had taken the soul out of Leonard's masterpiece.

No longer would that rod look out to him from the middle of the glass case, seeming to say, "Your hands and my subtle curves—what, Master—what can we not do?"

He sat around the tent and cast wolfish glances at me, and public sentiment sat stolidly by him. I carried an open jack-knife in my outside coat-pocket. I sat alone there, deep in the forest, with men whose sense of right and justice had been outraged to the breaking point. They did not even say good-by to me at the railroad station.

The moral of this unfortunate occasion is that if you are going to play marbles with Paderewski you had better take a few lessons on the piano.

ACQUIRING FORM IN GOLF.

SOME ADVICE TO BEGINNERS.

By Harold H. Hilton,

Amateur Champion of Great Britain.

WHEN invited to subscribe a short article by the proprietors of this magazine, I was particularly requested to make my remarks practical, so as to be as useful as possible to

is rightly termed, in golfing parlance, a "swing."

A swing it undoubtedly is. A rhythmic motion of all parts of the body, working in unison together, which enables an apparently weakly stripling who has been gifted with the power of applying all his forces at the right moment, to outdistance a matured man of herculean build, who trusts but in the force with which nature has endowed him.

To commence with the most important factor toward the desired consummation. A player must learn to slide the club in the palm and fingers of the right hand, on the upward swing, before he can successfully attain a correct golfing swing. It does not matter how he holds the club handle in the preliminary address to the ball; he may hold it well under, like Mr. Ball and Mr. Tait, or with the fingers interlocked, like Vardon and Taylor; it matters not, provided that he has mastered the science of sliding the club until it is resting lightly between the thumb and forefinger at the very top of the swing.

This is the great secret of a golfing swing, one which a boy, when learning, picks up instinctively. It is a species of natural golfing touch, more than difficult to acquire when a golfer takes up the game in later years. Practice it; it is worth practicing.

The accompanying illustrations, numbered 1, 2, and 3, will, on close observation, give a certain idea as to grip of the fingers at the top of the swing. It will be seen that in each instance the grip of the club is almost entirely controlled by the fingers. In No. 3 it almost looks as if the grip were too insecure to put on the requisite pressure on the downward journey, but the grip may be as light as light can be, provided the player still retains command over the club.

Golf is not a simple game, and requires an abnormal amount of practice to arrive at anything like perfection. I do not mean the practice which arises from playing round after round. This is naturally



No. 1.

No. 2.

Grip of Fingers at Top of Swing.

the average golfer. This I have attempted to do, and I can only sincerely trust that they will bear the fruit of my intention in that they will prove at least of some slight service to golfers in America.

In the majority of the athletic pastimes which are in any way kindred to golf, the ball is "hit." It may be that there are certain ways of hitting it, which may be classed the scientific and the unscientific, but they all differ from golf in that they do not require any necessarily concerted action of all the parts of the player's anatomy, at least in as great a degree as golf does.

In cricket, for instance, a player may strike the ball with great power and precision, in a firm or fast-footed attitude, with little of the motive power coming from the lower limbs, but in golf it is the unison of all the parts, the feet, the legs, the hips, the shoulders, and even the head, backed up by what would aptly be deemed the keys of the situation, the wrists and hands, which result in what

merely mechanical. I mean the practice which admits of experiments being attempted, for all clubs vary, one from the other, and have to be carefully tested, like children, and the player, when he can find time for a short period of solitary practice, should always favor the wayward and willful child—the club with which he is the least at home, the club with the peculiarities of which he is the least acquainted.

It is easily to be understood that the natural inclination of all golfers, be they good, bad, or indifferent, is to favor the club which gives them the most satisfaction. It may be a driver, a brassey, or an iron. It is indeed pleasant to take out such a club and play half a dozen balls with almost unerring accuracy, to see them soar away in the distance, or drop, one after another, in the vicinity of the spot to which you intended them to go; but beyond that feeling of satisfaction and pleasure it profits you nothing. You knew previously that you were a master, or a comparative master, of that particular weapon, and the pleasant time spent has probably only had the object of indorsing that knowledge.

That is not the way to improve your game, and surely the ambition of all players is to improve their game. Better



No. 4. At the Moment of Impact. No. 6. Right Elbow Close to Body.

leave your favorite club at home and take out some obstinate wretch of an instrument over which you have little or no control.

Every golfer has some weakness in his game. It may be only a comparative one

—that is, comparative with the rest of his game—but the weakness is invariably there. A golfer should always try and conquer that weakness, and it cannot be overcome except by assiduous practice—practice in solitude, with but the club and the balls for companions. I am

speaking from personal experience, as for many years there was one stroke in the game which baffled me, a stroke which I never approached to play except in fear and trembling; but I eventually overcame it—overcame it simply by assiduous practice—and I can only advise all golfers to follow the same mode of procedure. It is not a pleasant task whilst on hand, but it may save the necessity of a great deal of heartburning in the future.

Keep your hands low and the elbows, particularly the right one, well into the body, as in that position it allows the club to make a longer sweep, and the power is consequently greater. What is more, I can hardly call to mind a single player who has any claim to be considered in the front rank, with the probable exception of Mr. Hutchinson, who does not follow this principle, whilst, in addition, Messrs. Charles Hutchings and Sidney Fry, who, of all the players who commenced the game comparatively late in life, may be said to be pre-eminent, are both great disciples of this cult. Taylor, the present open champion, is a remarkable example of the efficacy of this method, as his elbows appear almost glued to his body, both on the upward and downward swing, and even in the follow through.

A besetting sin of nearly all golfers is to what may be termed “underclub themselves”; that is, to take a club with which they cannot possibly reach the distance they require. Even in the very first rank of golfers this fault is very marked, and one has only to stand and watch the approaches to any individual hole in an open championship meeting to note how repeat-



No. 3.—Grip of Fingers at Top of Swing.

edly approaches are short of the hole where there is no hazard to carry immediately in front of the green. A friend of mine amused himself at St. Andrews by standing at a certain hole and noting the percentage of approaches which were short of the pin, and he found that only twenty per cent. made their way past the hole. The remaining eighty per cent. were short in a greater or lesser degree.

Of course, it may be that a certain percentage of those which were short had not been hit quite truly, but even that is only an argument in favor of playing to be past the hole. It is just as well to be ten yards past the hole as ten yards short; and, as you cannot rely upon striking every ball truly in the center of the club, it is better to allow a little for this fact, even if you do go a little past the hole.

The hazards on the majority of courses are less numerous past the green than short of it. This feature of playing firmly past the hole has always struck me as one of the great merits of the game of both Vardon and Taylor, particularly the former, who seldom underclubs himself. Follow his example and you will not rue it.

If there is a doubt as to reaching the hole with an iron, take a cleek, or its equivalent. If there is a doubt as to reaching with a cleek, always take a wooden club.

When playing short approaches, keep the body comparatively still, not absolutely so, as there must always be a slight swing of the body in which the feet are a party, or else the freedom of the arms would be restricted, but do most of the work with the arms and wrists. They are quite capable of accomplishing the task in hand, and they are more easily man-

aged than the remainder of one's anatomy.

One often witnesses a first-class player pitch a ball up to the hole with an abnormal amount of spin upon it, the ball, on landing on the surface of the green, appearing as if a piece of string was attached to it, so quickly does it pull up; and there is an impression that, by some occult means, the player has imparted a mysterious screw on it, an impression which, from my own experience, I think is an erroneous one. It certainly is possible to impart an extra spin on the ball, but I have found that very few players attempt it, as it is a dangerous stroke, necessitat-

ing a dropping of the shoulders just at the moment of impact, and a ball struck truly off the face of a highly lofted club will always have sufficient spin upon it for ordinary circumstances. My advice is, when playing short approaches, try



No. 5.—The Finish of the Swing.

your utmost to strike the ball truly and leave the rest to nature. It is a principle which I have always followed and never regretted.

To beginners I have one word of advice. Put yourself under some competent man straightaway. You may spend a round or two getting through the initiatory stages of learning to hit the ball on the face of the club. Then arrives the time for the tutor. It is easier to form good golfing habits in early golfing youth, and difficult, very difficult indeed, to eradicate bad habits when once acquired. What is more, the powers of imitation are great in the golfing race.

In the majority of cases the imitation is quite unconscious, but it is probably more marked in connection with the Royal and Ancient game than in any other class of pastime. One has only to watch

the younger generation on any of the first-class links in England and Scotland to note the similarity, in a more or less marked degree, to some giant of renown. It may be that the similarity is only remarkable in the address to the ball; it may be that it is only noticeable in the freedom or length of the swing, or some peculiar action of the body; the Jersey school of golfers, of whom Harry Vardon is the great master, being a noticeable example.

All of the players who hail from that little island are blessed with a peculiar heave of the shoulders. Just at the top of the swing it is most marked in the case of Tom Vardon, the younger brother of the champion, who rises on his toes at the top of the swing, almost jumping from the ground; but, as I said before, all the Jersey boys have this peculiar heave in a more or less marked degree, and it cannot be anything but the natural power of imitation, probably to be found in a more marked degree in the would-be

golfer of younger years, but nevertheless always apparent in some form or another in the player who has taken to the game in maturer years. Do not, therefore, fail to put yourself in the hands of a good man, one who has followed the game from childhood preferred. Even if he does not succeed in imparting to you any principles of lasting value, your bump of imitativeness will have a good model to work upon, and imitation is half the battle.

One word before concluding regarding the illustrations which accompany this article. Nos. 1, 2, and 3 show the player at the top of the swing, from different positions, whilst No. 4 was taken just at the moment of impact; in fact, the ball has just left the club face. Following the series through, it will be noticed that even the head can claim some of the credit of the motive power, as it is taken back on the downward swing, and comes through with the hands and the body, and eventually finishes in the direction in which the ball has taken, as will be seen in No. 5.

A CAMEL HUNT IN ARIZONA.

By Langdon Ballinger.

DOWN in the southwestern corner of Arizona, well away from the commoner farings of miners and teamsters, lies a desert tract of land all but inaccessible, and certainly uninviting. From one's very feet the chalk-like floor stretches away to the far-distant sky line, its lonely monotony seldom broken by the dun-colored sage or the reddish rocks. He is the wise traveler who goes well out of his way to avoid its extremes of heat and cold—and the country-side yet awaits the genius who may render the crossing not comfortable, but reasonably easy.

The government of an earlier day made some such attempt, bringing hither about two score camels for military and postal service, but the experiment failed brilliantly, and Uncle Sam joined the ranks of the unsuccessful, leaving his camels to the usual and unenviable devices of strangers in a strange land. They wandered at will through the hills that border on the waste, startling lonely pros-

pectors, stampeding the horses of hunting parties, or, in cold-blooded deviltry, devastating the fields of an isolated rancher. Now and then one was shot or captured, but the fittest survived to find their way to the more hospitable regions that lie along the Upper Salt and Gila rivers.

Some even traveled over into the San Francisco valley, there to live in the camel's substitute for clover. The most vindictive camel ever foaled could afford to forget past wanderings and woes, once he had set foot on the verdant carpet of those fertile plains which reach gently up to the woods that separate the great snow-capped mountain peaks from their less pretentious brethren of the foot-hills.

It was in this fair land that we had camped, just at the edge of a little clump of birch that linked the open to the pine woods. Our immediate foreground, as we sat facing the river, or, rather, as much of it as we could see in the fast fad-

ing light, was enough like Connecticut to have made at least two of our party homesick, had they been inclined that way, and the breath of the needle-carpet, just above, must surely have whispered "New Hampshire" to that other whose capital had been largely invested in our prospecting. But the stars in the heavens and the very atmosphere that wrapped us 'round was California, while the whole wide West might well have been personified in the grizzled little man who guided our wanderings by day and usually beguiled our evenings with ultra-vivid tales of local murder and sudden death.

That particular night—and though the ashes of our camp-fire have lain cold beneath the snows of eleven winters, I can still recall each, smallest incident—his story was almost as new to him as to us. The week before he had been down on Blue River, where a rancher had treated him to the yarn and several whiskies. As the hospitable gentleman referred to had himself had the story only one or two removes from its initial source, it would have been a flagrant breach of Western etiquette to have doubted its truth.

It would seem that, only a few nights before, one Samuel Crouch, a thoroughly respected citizen of those parts, and an abstemious gentleman, moreover, who had not had a drink for at least three hours, was coming out of the brush, when there rushed past him in the gathering a great tawny beast ridden by something.

This word *something*, with its fascinating, Poe-like suggestiveness, was used advisedly, it would appear, for Mr. Crouch stood ready to make affidavit, and yet more ready to take several sorts of oaths, that it was not a human being. There were no screams, no cries, no sound whatever, till the great creature reached the fringe of bushes, and then nothing, save their own crashing evidence, that the vision had been one of this tangible world.

Mr. Crouch's story, as retold to us, was a trifle incoherent, and stirred the very depths of interrogation in some of us; but the narrator stood by his guns stoutly, adducing detail upon detail as if to strengthen his position by the mere weight of words. Finally he clinched all with the assertion that he, at least, was

no doubting Thomas, and that if it was not one of Crouch's own stock, wandering from the straight and narrow path, then it was the ghost of Jesus Villegos out for a ride under the stars.

This was but tinder to the already laid train of our curiosity. The old fellow needed very little urging to the telling of this Villegos, artistically embroidering the edges of the oft-told story with an easy skill that was only equaled by the picturesque vernacular in which he talked. Both are beyond me; I can only give the gist of his yarn, which called us back to the days of the Apache Chatto.

This enterprising chieftain, with a generous following of his gentle subjects, had, so the story goes, crossed the San, on his way to Sierra Madras, leaving a bloody trail for the troopers to follow. Many ranchers were killed, their buildings burned down, and their stocks scattered. When the raiders reached the Blue River, they came across old Thinston's sheep ranch, which is, or rather then was, the biggest in the West. The manager had got wind of their probable call just in time to clear out, and there was little to prevent their enjoying an extremely big time at the expense of the firm. They had it!—and when they had gone on to hunt up the next man, back came the manager to reckon damages. There were three dead bodies lying in the smoldering ashes of the huts—for the tip that had saved that manager's scalp had not come in time for him to spread the news with any remarkable thoroughness, but one of the hands was not to be accounted for, even in so gruesome a fashion. Jesus Villegos, a Mexican, never turned up. For a day or so, no one thought much about it, but as the weeks slipped past with no news of him, his acquaintances began to talk more and more of the Apache fondness for torturing prisoners, and at last it came to be regarded as a mere matter of fact that Villegos had been carried off for the tribe's further amusement—and that is how Jesus Villegos came into the mind of our guide.

As was to be expected, the missing Mexican became at once the topic of our discussion, and several solutions of the mystery had to be offered and debated. But as the evening wore on, the exertions of the day began to assert their rights.

and gradually the talk dwindled and died—as perhaps Villegos had.

Some hours later, when the fire had subsided to a mere glow, a huge animal tore through the camp, scattering the embers among our startled and half-awakened party, and stampeding our stock. Before a shot could be fired, it had vanished, and so suddenly that its very passage might have been doubted but for a scream, seeming not of this earth, which came faintly up to our ears as the apparition crashed down through the brush in the dark canyon of the river.

* * *

The apparition after that appeared frequently. The Mexicans called it "La Phantasmia," the whites nicknamed it "Red Ghost." Every one dreaded it, every one was curious for a sight of it. At last some one saw it by daylight plainly, and that same evening, at the town bar, reported that it was only a camel with a bundle of some kind tied on its back. Incredulity and contradiction raged high and long over this, the only direct piece of evidence which had as yet been adduced; and the question remained as far from settled as ever.

Then a lone prospector, at work near Chace's Creek, came upon it while it was grazing, and taking a shot at it, as it galloped off, brought down part of the bundle, a man's bootleg from the knee down! Thereupon speculation grew apace, and Villegos was resurrected and so firmly bound in public opinion upon the back of that rambling camel that the only wonder was the very pain of it did not bring him back to life.

All this ended one evening when a cowboy, torn and bleeding, was carried into the frame building that did duty as hotel. His mates had found him lying near the outlet of a blind canyon in the foot-hills. Before another day he had passed on to join the silent majority, but consciousness had returned to him long enough for him to tell his story. He had been out on a round-up on the hills of the Upper Gila, when he had unintentionally trapped Red Ghost in one of those little canyons that a Frenchman would call a *cul-de-sac*. In an attempt to escape, the beast had charged upon him, but swing-

ing his pony aside and back upon his haunches, he had avoided the rush, firing his revolver into the creature's body as it passed. Aroused by the pain and with its wicked-looking eyes wide open, and its neck outstretched, Red Ghost had turned upon him, and, as he fired again, had struck his horse in full career, knocking both it and its rider to the ground. The rage of the beast must have been demoniacal, for, maddened by the wounds it had by this time received, it had torn his side and thigh terribly.

That La Phantasmia was to blame for the funeral expenses incurred by the town was certain, for even had there been two of the quondam government beasts in the neighborhood, it stood to reason that but one should carry so ghastly a burden. In the course of another fortnight, a skull with some coarse black hair still clinging to it had been found and brought in, and later still, some arm-bones, scarce held together by shreds of dried skin. Parties were organized to hunt the beast down, but in vain. Their horses were no match for the quarry, especially when he took to the tracts of loose-lying sand, and all that was gained was exercise and the knowledge that the rider had disappeared.

* * *

One morning at early daybreak a ranchman dwelling on Eagle Creek woke to discover a big, awkward, sand-colored animal in his little potato patch. The end of La Phantasmia had come. He had committed his last offense against the laws of civilization. He and his mystery were at last to be examined at close quarters. Resting his Winchester upon the window-sill, the ranchman brought the creature down on his first shot.

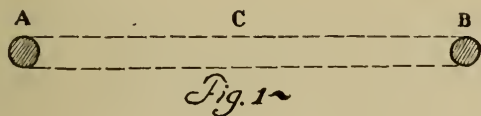
Wound and twisted over the back and shoulders were strips of rawhide and buckskin, in twists and fastenings that no white man would tie. He studied over one of the arrow-head splicings for a moment, and then went in for his knife. He had evidently solved the mystery to his own satisfaction, for as he returned he was muttering something about Apaches.

So was the mystery of Jesus Villegos solved.

CAN A MOVING BICYCLE FALL?

By George S. Hodgins.

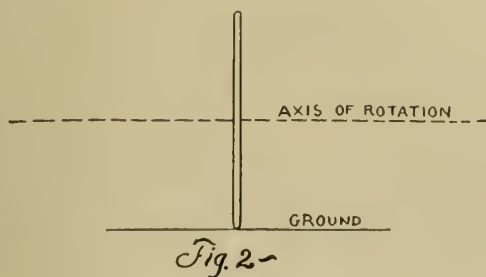
THAT a moving bicycle maintains itself in an upright position is a matter of common observation, but the reason why it does so is not by any means so obvious. To the beginner, this matter of common observation appears to be unattainable; but after he has mastered the art of riding, he finds that he has only succeeded in learning how to



adjust himself to a machine which all along intended to stand up, and did its best to stand up, in spite of the repeated and successful efforts made by the beginner to throw himself and it down.

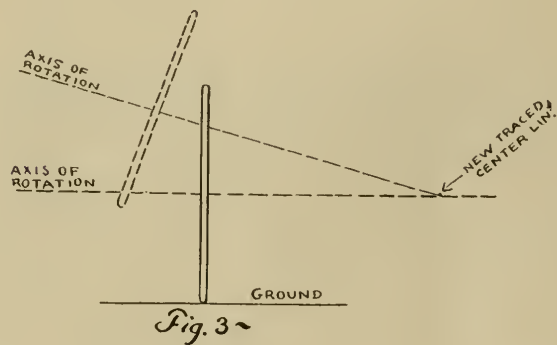
One general principle may here be stated, which is true of other things besides bicycles, viz.: That to produce equilibrium the center of gravity must be kept within the area of the base of support. A bicycle has two supports, which are the areas made by the slightly flattened tires of the wheels as they rest on the ground. These are, perhaps, each not greater in area than a quarter of a dollar, and the two lines joining their circumference inclose the theoretical area of the base of support within (or, in this case, over) which it is required to keep the center of gravity of rider and machine. (Fig. 1.)

This center of gravity is, of course, several feet above the ground, and it is ob-



vious that the standing bicycle has only to sway a very small distance to either side to fall over. In the case of a moving bicycle a good deal of the necessary adjustment to keep the center of gravity

over the restricted limits of the base of support can be made in the act of *steering*. If the cycle attempts to fall over to the right, the leading wheel, if turned to the right, causes the direction of the whole machine to change, and is equal in effect to the sudden side motion of both wheels to the right, just as a man balancing a walking-stick on his finger secures its upright position by rapidly shifting the base of support, so as to keep it below the center of gravity. But such adjustment is not possible with a bicycle. Suppose, however, that the sudden side-wise slip of both wheels through one inch of distance was sufficient to avert a fall to the right. Then the same effect might

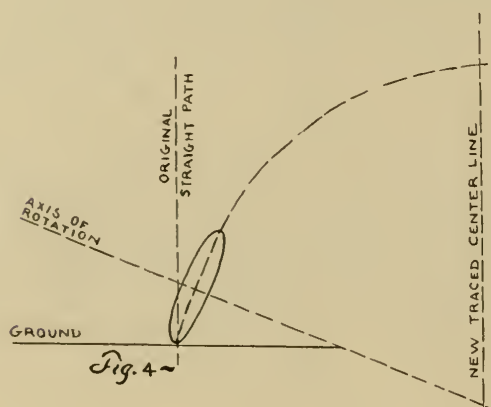


be produced if the leading wheel were turned so as to make it run two inches to the right. This would be equivalent to the movement of the whole base of support one inch to the right and equilibrium would be maintained. This kind of adjustment is peculiarly easy on a bicycle, inasmuch as the movement of the wheel may be assisted if too little, or counteracted if too great, by the slight alteration of the body of the rider, who can thus, at will, make the center of gravity of himself and machine a movable point, and so insure perfect balance.

All this is the probable explanation of the adjustment necessary to the maintenance of the short-lived vertical position of a novice, though it no doubt plays some part in the riding of an experienced person.

Be this as it may, there most certainly comes into play another property, which the bicycle possesses in common with all

rolling wheels. It is the same property which is exhibited by an ordinary iron hoop, rolled along the ground, driven by a child. The area of support is only a very small one in the case of the hoop. It may not be as large as one grain of corn, and yet if the hoop be whipped up smartly, and a good speed attained, it will show no tendency to fall over. In fact, the strokes of the hoop-stick given by the average child have little or no reference to the di-



rection of motion, yet the good-natured hoop rolls on steadily, to the great delight of the unskillful youngster. In moving along a straight line, which it will do unless acted upon by some force which compels change, it is simply obeying Newton's first law of motion, which says: "Every body continues in its state of rest or of uniform motion in a straight line, except in so far as it is compelled by forces to change that state." Now, the moving hoop, if not acted upon by any force which compels change, will go on moving, and cannot fall down. If it is acted upon by a force which compels change of direction, it will not fall down.

It is here, when change of direction comes to be considered, that we observe a striking phenomenon common to hoop, wheels, and, indeed, all revolving bodies which are balanced,—the axis of rotation resists any change of its position. It is this fixity of the axis which makes the hoop resist any effort to deflect it from the straight course.

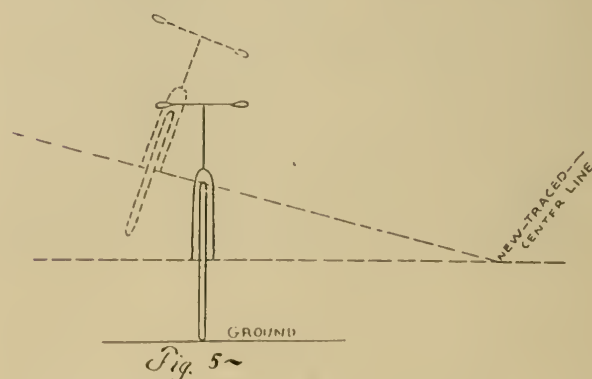
Just here it may be interesting to glance at the reason why a hoop, guided by a hoop-stick, may be made to change its direction. If a boy rolling a hoop wishes to avoid collision with the "man in the street," he does not, if he be skillful, strike the hoop a blow. He presses the stick against it, so that the top part will be in-

clined, say to the right. The hoop will respond by rolling in a curve to the right.

In order to understand why a hoop so treated curves to the right, it is necessary to closely analyze what has been done. One must picture the hoop rolling along in a vertical plane, and must fancy that he sees that imaginary line, the axis of rotation, as a straight, rigid piece of piano wire passing through the center, and extending out on each side to the edges of the sidewalk, parallel to the boards of the walk, with the hoop spinning down the center of the way. (Fig. 2.)

Now, it is obvious that if the top of the hoop be pressed over to the right, as it runs on, the imaginary piano wire will alter its position. It will no longer remain parallel to the ground; the left end will rise, and the right will sink down slightly. Now, suppose that this lower right end of the piano wire were to drag on the sidewalk, it would trace out a line parallel to the direction which the hoop was pursuing before it was bent over by the stick. (Fig. 3.)

This line traced on the ground is an important one to bear in mind. The bending over of the hoop has been equivalent to a portion of a turn or revolution about this new-traced line. It is as if the whole hoop had been revolved through a minute arc of a large circle of which the center is on the line traced by the right end of



the piano wire. The hoop, it is true, rolls on the sidewalk and does not rise up or fall lower, but the alteration of the plane in which it is spinning is equivalent to such a revolution.

This is an alteration of the axis of rotation, for one end of the piano wire goes up while the other goes down, and it is just such an alteration as this to which the hoop objects. Its objection takes this form: that when the alteration is forced

on it, it has a tendency to place the axis of rotation in line with the new-found center of revolution. In other words, the hoop desires to make the piano wire and the new-traced line coincide, and it curves to the right with that end in view. (Fig. 4.)

Now, to return to the bicycle. It can move forward when skillfully ridden, without pressure upon the handle bars, and it does so by reason of the fixity of the axis of rotation. If the road be smooth and level, it will not fall over, and, like the hoop, the imaginary piano wires through the centers of its axles maintain a level position, with no tendency to rise or fall at either end.

If, now, the bicycle be made, from any cause, to sway over to the right, the right ends of the imaginary piano wires dip, and trace a new center line of revolution for the whole machine. The spinning wheels will, in obedience to Prof. Perry's rule, endeavor to put their spinning axes (represented by the wires) in agreement with the new center line, and the bicycle will curve to the right; it will not fall down. (Fig. 5.)

The point to be borne in mind is that the bicycle has no tendency to fall down

when running along briskly, but when any slight want of adjustment of center of gravity over base of support comes about, the initial tendency of the moving machine is to curve. If the driving force were withdrawn, so that speed diminished, it would go on curving and would pursue the course of a gradually closing spiral until all motion had disappeared, and then only would it fall down.

In rapid motion its first and only tendency, when out of adjustment for the straight course, is to curve, and to keep on curving while the want of adjustment continues. It might be, of course, inconvenient for the rider who failed to readjust it, as houses, fences, ditches, or a high stone wall might lie in the appointed curvilinear path. In silently obeying the laws of motion the bicycle would take no note of these trifles, but would inconveniently strive to curve, and never would it so far forget itself as to willingly fall down while any unobstructed motion remained to it. A moving bicycle may run upon a straight path, or it may curve to the right hand or to the left, but in motion it cannot fall down. This is paradoxical but true.

WHERE SNIPE ABOUND.

SOME PRACTICAL SUGGESTIONS.

By Frederick A. Patridge.

THE southern shore of Long Island, fringed by numerous bays, is particularly adapted to the snipe-shooter. These bays are generally shallow, with a narrow strip of sand separating them from the ocean, while along the shore miles upon miles of meadow land afford feeding grounds for snipe which cannot be excelled.

The shooting grounds are generally easy of access. An hour's sail from any of the villages on the mainland will carry you to one of the sniping bars; or if you prefer meadow shooting, the bay would not have to be crossed.

Among the better-known gunning bars in the Great South Bay are those near Gilgo and Fire Island inlets. Gilgo inlet, as it is still called, although the inlet has

been closed for four years, is nearly south of Amityville. To get to the shooting grounds you must go through a narrow and crooked channel, where a small, quick working boat is essential; but any of the baymen, who in summer time fit out their boats for the accommodation of sailing parties, will land you safely on the bar.

The snipe feeding grounds around Fire Island inlet are more numerous and much easier to reach than those of Gilgo. On this long strip of sand, locally known as the point of the beach, washed by the ocean on the south side and separated from Oak Island beach by a channel nearly a mile in width, are three shallow depressions, called pond-holes by the native gunners.

In two of these the water rises and falls



Dowitcher.

with the tide, and at the last of the ebb there is not, on an average, over two inches of it covering the sandy bottom. The third pond (the one on the extreme point) has no outlet, but depends for its water supply on a storm from the southwest, which kicks up a heavy surf and drives it over the narrow strip of sand that separates the pond from the ocean. This pond-hole is not generally thought to be as good for shooting purposes as the other two, but in one morning's shooting, two years ago, I killed fifty-eight big snipe there, nearly all yellow-legs.

Perhaps of these three ponds the middle one is the best; it is larger and more in the line of the snipe's flight than either of the other two. The snipe generally follow the beach from the east and cross the inlet to the Oak Island shore, near this pond.

The pond farthest to the east is considered the best of the three when an easterly wind is blowing. For some unexplained reason plover are generally more numerous here, while at the other ponds yellow-leg predominate.

Oak Island, an island near the beach to the south of Babylon, is another place where yellow-leg and kriebers (meadow snipe) can be brought to bag. There is a small pond-hole in the meadow on the northern side of this island, and on stormy days, when the ponds on the beach are deep with water, this is a favorite spot for sportsmen. But a word of cau-

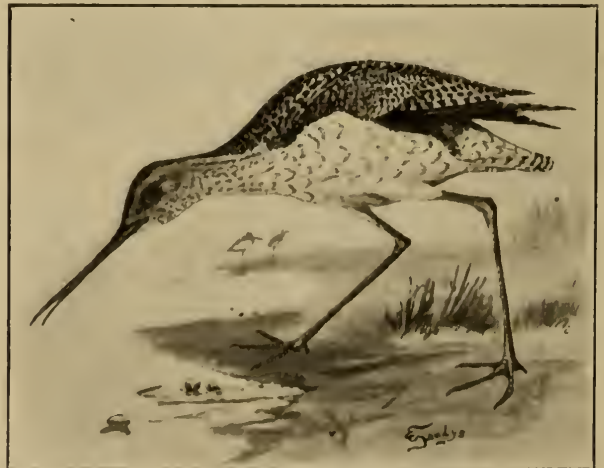
tion to one unacquainted with this place. Do not go there on a still day, or when the wind is to the north; mosquitoes will torment you, green-headed flies (the pest of the beach) will eat you, and the chances are very much against your getting a shot, though you lie in the blind from sunrise to sunset.

The three places I have described are considered the best sniping grounds on the Great South Bay; but of course there are other islands and points, both to the east and west, where a good bag can be made on a favorable day.

Shinnecock Bay, although smaller than the Great South Bay, is a favorite resort of the snipe shooter. There are many shoals, covered with bunches of sedge-grass, which afford excellent shooting in the early autumn.

One of the better-known sniping bars in this bay lies to the north and east of the Shinnecock Life-Saving Station, and is about two miles from the dock at Good Ground. This bar is in many places bare in the summer time; but the greater part of it is covered with water varying from three to six inches in depth. Sedge-grass grows on the bar in many places, and it is in this that the sportsman either builds a blind, or, if the water is deep enough, pulls his sharpie into it, the tall sedge making an excellent cover. Besides this bar there are others in the western part of the bay, and even the mud banks formed by the dredge which dug the canal connecting the two bays have blinds built upon them.

The sniping bars I have described, both in the Great South Bay and Shinnecock Bay, are known to nearly all the baymen, and the city sportsman, unfamiliar with

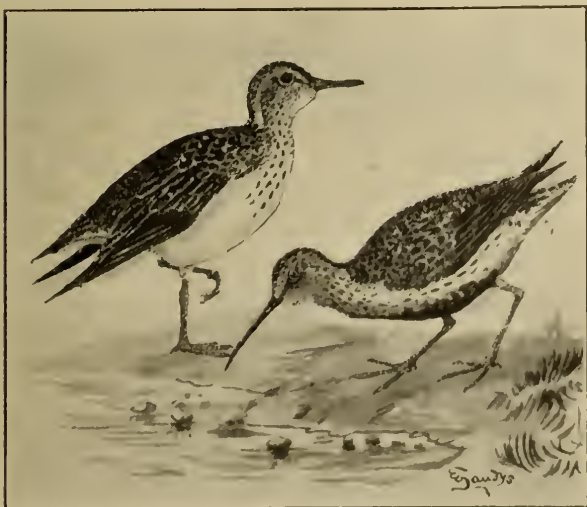


Greater Yellow-Leg.

the locality, who hires a boat from one of them, can generally depend on any information they give him, as these men are, as a class, obliging and truthful.

It is interesting to note the various species of snipe found on these bars. At the three pond-holes on Fire Island beach nearly every variety has been killed—yellow-leg (both the winter or big yellow-leg and the summer or small yellow-leg), black-breasted and golden plover, jacks, robin snipe, willet, marlin, and, in fact, every kind; while on Oak Island, yellow-leg (both big and little) and krierkers are nearly all you would see in a day's shooting. I have shot snipe every season for the last five years on Oak Island, and, as far as I can remember, have only killed one plover in all that time. At Shinnecock and Gilgo you will find all the different kinds, as at Fire Island.

Now a word as to clothing, guns, stool, etc. In the hot weather rubber boots are an abomination. When a man has been lying in a blind for hours with a summer sun shining on him, boots get so hot that you cannot bear your hand on them, your feet feel as if they were in an oven, and a general sense of discomfort prevails. An old pair of shoes and a pair of light trousers will answer every purpose and are quite cool and light. An old felt hat with a wide brim and a few holes in the crown is, for coolness, better than any shooting cap ever devised; and a light sweater is more comfortable than a gunning coat, as it gives the sportsman more freedom for his arms—a thing not to be despised in snipe shooting, as many a bird is killed when you are twisted half-way around in the blind.



Semipalmated Sandpiper.



Hudsonian Godwit.

Don't use an expensive gun for snipe shooting. A gun will get wet and rusty, no matter how much care is taken of it; sand will get on the bolts, and, if a hammer gun, between the hammers and the locks, in the holes for the plungers, and in every conceivable place in which a grain of sand can lodge. A cheap hammerless gun is the best form of gun to use; there are not many places for sand and rust to lodge. A repeater is a delusion and a snare for this kind of shooting; the shells will get more or less damp, no matter how careful you are; then, of course, they will swell and stick in the magazine, and sand has every chance in the world to get under the slide and in all the working parts of the gun.

The stool or decoys used in snipe shooting depend mainly upon the kind of snipe you expect to shoot; for meadow shooting, yellow-leg stool are the best, while on the beach any kind can be used. You have doubtless read or heard of gunners using skimmock shells in place of stool; they are perhaps better than no stool at all, but do not mislead yourself with the belief that they are as good as well-formed tin or wooden stool.

In nearly every book dealing with snipe shooting the author advises you to put your stool to windward of the blind. In my opinion that is a mistake. I have shot snipe for years, been out many times with other men of long experience, and never yet, unless the blind was on the leeward side of the pond or bar, were the stool put to windward of us.

There are many excellent reasons why

stool should be placed to leeward of the blind. Snipe as a rule always fly against the wind, and when coming to stool always come in from leeward. If your decoys are to windward of your blind you will have to be craning your neck around to watch the birds, while with stool to leeward every snipe will be in plain sight.

In setting out decoys always stick them up in water if possible; stool in the water will show up much better than those on land. Do not make the mistake of putting the stool in one little bunch; spread them out well, and if twenty-five or thirty stool are used, you will be surprised at the showing they will make. There is another little trick in setting out stool that oftentimes gives the gunner a better shot.

Put the stool well to the right of the blind; then, after you have shot your first barrel into a flock, the rest of the birds will be to the right of you, which is much handier than turning to the left for the next shot.

Many sportsmen who go out for a few days' snipe shooting do not think the weather and wind make any difference in the shooting; but it is almost useless to go to the south shore of Long Island unless there is a strong southwest wind blowing. Then, again, there are certain times for beach and meadow gunning. When the tide is falling you will see the snipe feeding on the beach, but at high-water the knowing sportsman will take his chances on the meadows.

OVER HARDANGER VIDDA.

THE UPLAND SUMMER PASTURES OF NORWAY.

By Elizabeth Taylor.

I HAD planned, for more reasons than one, to cross the Vidda, the great upland summer pastures of Norway, through the pass of Voringfos; but one was a good one: for close by the great waterfall of Voringfos stood Ole Garen's little hotel, where one could, until the fates were propitious, stay in comfort, and make excursions, and botanize, and sketch, and catch mountain trout. It is not at all times one can cross the Vidda.

When I made this resolve, I was still in Ullensvang, which is, perhaps, the most charming spot in Southwestern Norway. Orchards of plums, cherries, and apples grow on the fertile hillsides, protected by the mountains from the chilling-sea breezes, and on the slopes are the grass meadows bright with bluebells, yellow vetches, pink catchfly and spotted orchids.

The houses of the peasants are roofed with sod, and in that balmy, moist air a lovely growth of flowers soon springs up. Botanizing on the house tops was one of my diversions. One roof was covered with lightly tossing golden and white daisies; another was a charming mosaic of color made by sheep sorrel, bluebells, little ferns, and forget-me-nots, while many

were purple from hundreds of tri-colored heart's-ease.

These little pansies, the "Johnnie-jump-ups" of our old-fashioned gardens; the "Stedmor-blomster," or "stepmother flower" of the Norwegians, grew luxuriantly along the country roads and in the meadows. Often, when seated on some grassy slope above the Fjord, I would see long, purple bands of these pansies looking like sky reflecting brooks, which appeared to flow over the crest of the hill and mingle with the steel-blue waters below.

The crop of these steep hillsides is not large enough to feed the cattle all the year, and in the spring the farmers wait impatiently for the time when the cows can be sent to their Vidda pasturage. One large patch of snow on a mountain across the Fjord at Ullensvang serves as a guide; when it has dwindled to a certain size, they know that on the Vidda the grasses are long enough, and the cattle may leave the valley. The past winter had been severe, and the snows lingered late.

At length, one afternoon, I saw several large barges crossing the Fjord, towed by smaller boats, in which a number of young girls were rowing. The cows were on their

way to the Vidda at last, and surely it was time, for already the crimson foxgloves, those true midsummer flowers, were opening their heavy racemes. The barges stopped a short distance from land, and I wondered how the cows were to get to the shore; but they evidently knew what was expected of them; one by one they plunged boldly over the boat's edge into the water and waded to the land. Once on the bank, they went off at a brisk trot, and the group disappeared up the road, tossing horns, tails and red bodices, half-hidden in a whirl of dust.

But I was not to follow yet. For a week thereafter storm-clouds swept over from the Vidda, shutting us in from the outside world.

We could hear the uproar of the little brooks, swollen to thrice their usual size, while the mighty Voringfos Falls fairly thundered in its leap to the valley, five hundred feet below, making the windows shiver and the house tremble — sometimes a sudden current of air would part the clouds, and we could snatch a fleeting glimpse down the rocky gorge, and see the foaming river, and the precipitous cliffs, seamed with scores of the tiny streams, which appear only in times of storm.

Our inn, Fosslé, was almost deserted. Now and then a hardy Norseman, bound on a fishing trip, would take refuge with us, or an English tourist climb up from the valley to see the great waterfall through the clouds of mist and spray which filled the chasm. But we fared well in our imprisonment. Reindeer steaks and mountain trout we had daily, and on the walls of the wide entry hung beautiful robes, gloves, and Lapp boots, all made of reindeer skins.

These signs of Arctic life showed that we were on the borders of the great mountain plateau, the Hardanger Vidda. In that latitude, an elevation above the sea of 3,000 to 5,000 feet is sufficient to bring

one into quite another world from that known to the average tourist in the sheltered Fjords. One finds on these barren heights a true Arctic country, like that which encircles the earth by the shores of the Polar Sea. Reindeer, white foxes, wolverine and lemmings are seen alike on the Vidda and in the barren lands of Northern Canada, and many of the same species of small, bright Alpine plants grow both in Siberia and on this Norwegian plateau.

The Vidda plays an important part in the lives of the farmers in the valleys — many of them own or rent land on its borders, and send up their cattle to graze there during the short summer months. Beyond the cattle range, flocks of sheep and herds of semi-domesticated reindeer



The Reindeer Herder's Hut

find pasturage, while the remoter districts remain almost unknown, and afford refuge for bands of wild reindeer.

I meant to traverse the Vidda throughout its greatest length—a difficult five-days' journey. I was warned against the obstacles of the trip, the streams to be forded, the exposure to storms, and the danger of falling ill on the way. But with a thoroughly reliable guide, one may undertake difficult journeys, and I had in mind one of the best of guides—Ole E. Legreid, of Vik.

At last the day of deliverance came, and then we prepared for our Vidda excursion.

sion. "We" meant Ole, Freya, and myself. Ole looked as if he had stepped out of one of Tidemand's paintings of old Norwegian life, and I never grew accustomed to his taking his place in this workaday world. He was tall, and strongly built, with clear, hazel eyes that had a direct, simple, boy-like look, and his frank smile showed a wonderful set of flawless teeth—a splendid specimen of a Norseman. Well versed in the lore of Vidda travel, fertile in expedient, thoughtful, faithful, and an intelligent, pleasant companion, a woman might venture with him to take the Vidda journey without too many misgivings.

Then there was Freya; she had so much character and ability, and such a personality of her own, that I often forgot, in speaking of the adventures of "we three," to mention that she was a pretty, buff-colored pony of true Norse blood. Round, fat and sure-footed was Freya, with large, dark eyes, and ears, tail, and mane of a dusky brown. One great brown lock fell over her face almost to her nose, but the rest was clipped, and stood erect in a heavy brush, making her look, with her full neck and short body, like one of the chariot horses of some old Greek bas-relief.

Freya, like all Norwegian ponies, ignored "whoas," or pulling on the lines, unless accompanied by the sound "p-r-r-r-r-r-t!" This I had practiced on a former visit to Norway, in public and in private, and so far had not succeeded in making any noise which the ponies recognized as a command to halt. This disqualification of mine had at first troubled me, but I soon found that it would have made no difference. A moment's inspection had convinced Freya that I was a "tenderfoot" in all matters relating to Vidda travel. Therefore, she thought herself justified in ignoring all my wishes, and judging what was best for both of us. Several times, my pride being hurt by this decision of hers, I made a feeble effort to assert my dignity and authority, when Freya would pause, turn her head and look me in the eye with an expression which said clearly — "Come, now, who knows most about this kind of thing—you or I?" and really, after that, there was nothing to be said.

Then there was a pack-horse, a very good one in his way, but hardly "one of

us." I chose a Norwegian saddle for Freya, just like the top of a child's high chair. In this wide, roomy seat, one sits sideways on the horse's back, with both feet resting on a small shelf of wood, which serves as a stirrup.

It was a perfect day when Freya and I left Fosslé. The sun shone warm and clear, and a spicy, sweet smell arose from the rain-soaked moss and heather. During the first part of the day the trail was too difficult for riding. Freya led the way willingly enough; the pack-horse followed under Ole's guidance, and I brought up the rear, not being accustomed to the rough way.

After two hours of wearisome plodding through marshes and over rocks of the steep declivities, we reached higher barren ground, and, as we climbed to the northward, we saw splendid views of the distant glacier, the Hardanger Jokul.

About one o'clock we reached a saeter, or mountain dairy, placed in a sheltered nook between the crags, where the grass grew fine and green. The only other saeter I had ever seen was on the Dovrefjeld, in another part of Norway, which was a good-sized four-roomed cabin, with white sanded floors strewn with juniper twigs, and everything as neat as possible.

With this delectable day in mind, the Vidda saeter was a great disappointment. It was a rough little affair of turf and stones, with mud floor, no furniture but a bunk in one corner, and a small bench; no light but that which came in from the open chimney-place, where a large kettle of cheese was simmering. A sleepy-eyed girl rose from the bed as we entered, and heated some milk for us over a fire of dwarf birch twigs. A small room opened out of the one we were in, and there the milk and cheese were kept, and on the back side of the bunk, among the rough peasant coverlids, we saw the great cakes of "gammel ost," or old cheese, placed there to ripen during the summer months—not an attractive sight to one fond of gammel ost.

The life of these saeter girls is not an easy one. They remain upon the Vidda for about three months, living alone in these wretched shelters of turf and stone. There is butter and cheese to be made, the cows to be milked, the saeter work done, and dwarf birch and juniper cut and dried for fuel, and brought from a long dis-

tance. We drank our milk with much enjoyment, smoky and flavored with birch leaves though it was, and soon after started on our way again.

We climbed up and down the barren hills, forded streams, and passed over the rocky uplands where the snow lay in the hollows, and where the only vegetation was the crisp reindeer moss, and beds of bright-eyed Alpine pinks and gentians. Then, as the sun sank low, we entered the shallow valley of the Bjor. Here are a number of saeters some distance apart, built of lichen-covered rocks, and roofed

I looked at the tiny one-roomed hut, and reflected that we had no other quarters for the night. But one must expect rude quarters in Vidda travel, and I explained to the occupants that I had "roughed it" in America, and would not mind, if they didn't. So we had supper together in the most amicable fashion, and I heard tales of big trout and fine fishing to be had on some lakes near the center of the plateau.

After supper, I went over to the saeter where Ole's two daughters, Britta and Karen, and his little boy, Hans, lived during the summer months. Britta was call-



Where Solid Comfort Reigns.

with green sod, harmonizing so perfectly with the surrounding turf and boulders that it was with difficulty that one could detect them. Sometimes it was the open door which made a dark accent and attracted the eye, or the blue smoke that curled slowly from the mossy chimney in the still air of the valley.

At last, not far away, we saw Ole's saeter and the refuge hut. As we approached, some ponies were seen feeding not far away, and Ole said: "There are people in the refuge hut, maybe three or four hunters." I thought some long thoughts as

ing home the cows. At the door of the saeter she stood, with head raised and throat bare, sending her fresh young voice ringing far across the wild rocky slopes of the Vidda.

It was no peaceful pasture-land that stretched around the saeter. The snow-flecked hills looked dark and forbidding, outlined against the level golden bars of the west. Violet mists were creeping up their rugged sides, and a cold breath of air stole up the valley, bearing with it a wild northern odor of peat and moss and dwarf birch. The great spaces and the

silence oppressed me, and Britta's coaxing voice was a welcome sound as she again took up the refrain, summoning from their rocky feeding grounds Golden Rose, Roseleaf, Mountain Rose, and the other cows, all of the rose family. Chilled with the evening air, I went back to the refuge hut, where Ole had made a fire of birch twigs on the high, raised hearthstone.

Then I unpacked my traps at the hut, and with a large shawl and "thumbtacks," screened off one bunk from public view, and, within its shelter, crawled into my sleeping bag of reindeer skins. Ole, as "chaperon," slept on the floor by the fire-side, and soon a peaceful silence fell upon the rough hut.

We were all up early on the following morning—the hunters bound for the Voringfos, on their homeward journey. I wanted to catch some trout, and Ole was to hunt up a herd of 1,000 semi-domesticated reindeer, known to be grazing somewhere in the neighborhood, and bring it down for me to see.

During a long journey to Arctic America, the year before, I had become much interested in the subject of reindeer, not only our two native species, the Barren Ground and the Woodland reindeer, but the domesticated variety of Siberia and Lapland. I had heard of Dr. Sheldon Jackson's plan to introduce the Siberian deer into Alaska for the benefit of the starving Eskimos, and the doctor had asked me to take some measurements of the Norwegian animals, to see how they compared in size with those from Siberia.

Within the last twelve or fifteen years the domesticated reindeer have been brought from Lapland to the high mountain lands of Southern Norway. Their owners do not depend upon the herds for entire support, as do the Lapps and Finns, but still they make a good profit by the sale of the skins, horns, and meat. The deer are never milked, but are tended like sheep on the distant Fjelds, the herd being owned by four or five farmers, who live in the lower country, and take turns in sending a man to watch them. They require less care than sheep, and afford a larger profit, as the latter must be fed during the long Norwegian winters, while the deer live out all the year without shelter, scraping away the snow which covers the moss and lichens.

It was late in the afternoon when I heard Hans cry out "Ransdyerne!" (the reindeer) pointing towards one of the hills back of the hut. There I saw a great crawling mass of brown and gray objects, looking as if a slowly moving avalanche of Vidda rocks was descending upon us. As it approached, I could see the tossing horns, and hear a confused mingling of sound, cries of the herdsmen, the grunting of the tired fawns, which sounded like that made by a pig when he meditatively digs his way down some country lane, and the peculiar crackling of the large, elastic hoofs, which open when the foot is placed upon the ground, and close when it is raised. It was delightful to see the fawns take refreshment as the herd came to rest near me. Down they plumped, like so many lambs, on their knees, their funny white tails wagging supreme satisfaction at the rate of five hundred wags to the minute.

Hans, who had a bag of salt, began to sing a quaint old Norsk tune, with which the herdsmen call the deer together, and at once they came crowding up about him, with their long necks outstretched, their eyes protruding, and with many backward starts of alarm. I succeeded in coaxing two shabby old does up to take salt from my hand, but most of the deer were very timid, not being accustomed to the sight of a woman's dress.

We left the Bjor hut early next morning, with a high, cold wind blowing, and the clouds hanging low. Freya was reluctant to leave the sheltered saeter lands. She disapproved of my trip from beginning to end. It was a new experience for her. She understood (and despised) the manner of the tourist, whom she was perpetually carrying from the excursion steamers to see the Voringfos. She comprehended, also, her fortnightly visit to the saeter, to carry provisions and bring back butter and cheese to the valley, but what this small person meant by leaving the beaten tracks, and going off into the wild Vidda, was a problem too deep for her sagacity. Being a pony of principle, she did her duty without serious objection; but being also a feminine pony, she showed her impatience in a score of airy affectations.

We crossed the Bjor early in the afternoon, and arrived at a small "fiskebod," or fisherman's hovel, on a barren height

above one of the numerous Vidda lakes. There we found an old man, living a solitary life, seeing no one for weeks, fishing in the lakes for the great Alpine trout, and salting them down for winter use. The rough shelter was welcome enough, for I was chilled with our long ride, and a storm was sweeping down upon us.

The old man seemed glad to see us. He brought out a five-pound trout, caught that morning in the lake, and boiled it for our lunch. Then with a bit of newspaper for a plate, and a "tol knife" serving as both knife and fork, I curled up on a stone before the open fireplace and made a good meal. The old man listened eagerly to Ole's report of news from the Fjord, and the men talked steadily on in the sing-song cadence of the Norse tongue, while the wind howled furiously around the fiskebod, and blew down the chimney in gusts, scattering the ashes on the hearth.

We had to reach Sandhang, the next refuge hut, that night, and the rain was already splashing down in great drops as we said good-by to the old man. A pitiless icy blast drove the rain full in our faces, and I could not walk fast enough to keep warm, for the wind almost carried me off my feet. There was nothing to do but to huddle into as small a heap as possible, and, with bowed head and closed mouth, bear it as well as one could, leaving Freya to take care of me. She, all her airs and graces gone, toiled on patiently and faithfully through the long afternoon.

As I looked out now and then from under the shelter of my capuchin, I saw always the same sight — gray, angry clouds, gray hills, over which the gray mists were sweeping, and long stretches of gray Alpine lakes, the surface of the water gleaming with flashes of foam.

How welcome Ole's cheerful voice was breaking in upon a half-stupor from cold and fatigue, telling me that Sandhang was in sight! I looked up, and saw on the shores of Normandslaagen, in a

waste of rocks and moss, a small cabin of boards, and a fiskebod where a fisherman, Sylvest Koamme, lived during the summer months.

We spent the night at Sandhang, and the next morning left even this slight link with the outside world, and started on, over the highest land of the plateau, a country desolate beyond expression, but charming in color.

"Monotonous, dreary and uninteresting," I had heard the Vidda called; but as I surveyed the beauty of its changing color, I thought of the line: "God leaves no spot of earth unglorified."

Our stopping place for that night was at the shooting camp of a party of young Scotchmen. Our only alternative was the wretched hovel of a Lapp reindeer herder some distance further on, and I decided, though with some misgiving, to ask for shelter at the camp.

Our journey the next day was to be the hardest of all; ten and a half hours' travel to the first gaard on the southern borders of the Vidda—that of Lars Bernanuten. We rose early at the shooting camp, said good-by to our kind hosts, and started with the Lapp as a guide. A strange little creature, he was, dressed in true Lapp costume, and carrying on his back a great pouch of reindeer skin, and an old-fashioned gun in a reindeer skin case. Long tufts of faded hair showed from under his cap of hair seal, and skin, eyes, and dress were the same neutral tint,



The Cone Ferry.

like the dried moss of the Vidda. As I looked at this gnome-like little figure skimming lightly over the ground ahead of me, and then at the wild surroundings, I felt as if I were part of an old Norse fairy tale.

That day we passed over the barrenest region on the Vidda. As far as the eye could reach, rocks, nothing but rocks everywhere—almost all traces of vegetation had disappeared. Only a dark green mould and occasional tufts of the reindeer leaf growing in the little hollows. Immense boulders were outlined against the sky,



Desolate Beyond Expression, but Charming in Color.

looking like the relics of some old Druid worship. A bitter wind swept from the snow fields of the Hankili mountains far off to the northwest. We ate our lunch sitting under the shelter of some overhanging crags, and after the ponies had rested an hour or so, started on our way again. There was no trail—right over the hills we went, and through the marshes, shortening the distance in every possible way to enable us to reach the difficult descent to Bernanuten before the twilight came.

At last, just at dusk, we reached the crest of a high hill, and, looking down over the rocky ledges, saw far below us the sodded roofs of the Gaard of Ber-

nanuten. We could hear the call of the saeter girls, and in the still clear air arose the voices of the farmer and his wife, who sat outside the gaard door churning, and wondering at the visitors who were descending upon them. In the fast failing light, we had a difficult scramble down the hill. The man took the horses one by one, while Ole helped me to slip down the steep rocks and over the deep miry holes between.

When we reached the bottom, covered with mud and quite tired out, we had a pleasant welcome from Lars Bernanuten and his wife. They opened the door of a small, two-roomed log cabin, a short distance from the farm-house, and soon sent a good fire crackling up the three-cornered chimney. Fladbrod, milk, and dried mutton, tough and tasteless, were all they could give us to eat. The day had been a hard one, and it was pleasant to see a bed once more.

The Bernanuten place was only a "grass farm," too cold for even potatoes to grow. Hay-making was in progress, and the air was filled with a fragrance like that of sweet clover. Rough and bleak though it was, the farm seemed pleasant enough after the barren Vidda.

All next day we traveled steadily downwards, passing the timber limit, and seeing once more the dusky pine forests and fertile meadows. Just before dark, Ole pointed to the valley below, and there I could distinguish, between the masses of foliage, a curving white line. It was a post road, something I had not seen for more than five weeks.

An hour after, we arrived at a farm-house, where Ole borrowed a stolkjaerre, or country cart. We loaded our traps behind, took off Freya's saddle, and put her in harness, and were soon fairly flying along the smooth road towards a farm-house, where we expected to pass the night.

It was quite dark by this time, and the rain poured down steadily, but the white road could be followed easily.

By seven o'clock, we had left the farm-house, and were spinning down the road again—an exhilarating drive in the fragrant, pine-scented air. There was a little inn farther on, where we knew we could have a dinner, a real dinner, once more; and our journey ended in a cozy, clean inn.

TWO-YEAR-OLD RACING IN AMERICA

AND THE TWO-YEAR-OLDS OF 1900.

By W. H. Rowe.

ONE of the most convincing proofs of the sportsmanship, sentiment, and true love of the thoroughbred which lie at the very heart of the racing world is to be found in the fresh infusion of interest which each season's crop of two-year-olds contributes to the "Sport of Kings." However important and interesting the various series of struggles between the equine "old friends" may have been, the return of spring is invariably eagerly awaited by the followers of the turf, because it brings in its annual round a new generation of race horses. These "new friends" are always welcomed with open arms, so to speak, and their own merits, as well as their comparative merits with the youngsters of preceding seasons, invariably furnish topics of debate and opinion which are ever old—and yet, at the same time, ever new.

It easily follows from all this, as well as from considerably more which might be written along the same lines, that the two-year-olds of 1900 possess, as a class, features of the utmost importance as well as of the greatest interest to all lovers of the thoroughbred. The exact status of

In a word, no consideration of the two-year-olds of 1900—or of any other year, for that matter—can possibly be undertaken without a preliminary protest—and an earnest one, too—against the undue prominence which the racing of the juveniles has been given upon the American turf. We race our two-year-olds too



Irritable.



Tommy Atkins.

two-year-old racing upon our American turf is also a prominent consideration in this connection, and possibly the most vital matter in the whole department of our turf activity and policy is to be here found and criticised.

often. Instead of the juvenile form being merely the threshold of a horse's racing career, which is all it should be, it is in far too many instances virtually the sum and measure of his achievements. Rangy, growing colts, who would in any other country be allowed ample time to mature and get their real strength before being seriously put at the downright business of racing, are here given a hurried preparation and sent to the post just as early and about as often in their two-year-old form as lies within the skill and power of their managers. Why? Simply because our American racing associations persist in offering the majority of their valuable events for horses of this age.

In no other country does such a policy obtain. England, the true home and citadel of the thoroughbred, has many turfmen who regard her two-year-old racing as carried to excess. Perhaps they are correct in their belief, for she certainly has a long array of events for the juveniles, and many of these are of really tempting value. As a matter of fact, however, England's most valuable turf events

are for seniors. The richest two-year-old prize is guaranteed at only £5,000, whereas the Epsom Derby for three-year-olds is £6,000. Then, too, the most valuable two-year-old events rarely exceed £2,500, whereas there are several three-year-old



Commando.

fixtures which invariably exceed this amount. Beyond all this, we have the three great £10,000 races, each guaranteed to be worth that amount, in which the two-year-olds have no part or parcel. Does not all this demonstrate that England's turf policy is plainly calculated to cause a horse's supreme efforts to be reserved for his three-year-old, or even later, career?

America, however, directly fosters the racing of two-year-olds. The most valuable turf event of the year, the Futurity Stakes, is for the youngsters, and far too large a proportion of our other prizes go in the same direction. The result is that our two-year-olds are raced entirely too early and much too often, and this, being especially true of the better class, constitutes a genuine detriment to the American thoroughbred. The "rush and ruin" policy develops bad tempers, impaired growth, and other direct disadvantages to the horses as individuals, and, as has just been said, to the thoroughbred itself. If England's two-year-old policy merits criticism, surely that of America calls for nothing short of condemnation and earnest protest.

The two-year-old racing of 1900, especially that which has come under the personal observation of the writer, upon our Jockey Club race-courses in the vicinity of New York, has been of really good class and great interest. The chief criticism to be made of the various stake

events, however, is that their conditions in too many cases impose a weight penalty upon winners and an allowance to non-winners, the result being to almost "anchor" the former. The Messrs. Keene's Tommy Atkins and the Messrs. Fleischmann's Bonnibert and Irritable were thus overweighted in their races at Brooklyn and Coney Island by reason of penalties earned at Morris Park. A penalty upon winners is thoroughly allowable, if not imperative, in almost every stake event after the season is well under way. Another justifiable way in which to attempt to equalize matters is by granting a concession to non-winners. But the combination of a penalty and allowance in the same event produces a gap which the top-weights are practically unable to span. It should be added, however, that there is a tendency to remedy this evil from year to year, and we shall doubtless soon witness a more satisfactory state of affairs in this direction.

The two-year-olds which have contested the important events of the American turf during the first half of the racing season of 1900 may be justly described as



Olympian.

comparing favorably in class with those of almost any past year of history. The comparative merits of the horses of different years or decades must always be more or less a matter of purely personal opinion, and it is therefore an easy task to create an argument along these lines whenever turf topics are up for discussion in an assemblage of lovers of the "Sport of Kings." It is not often that verdicts of a fairly unanimous nature are reached under these circumstances, but it is hardly an exaggeration to say that the general conclusion regarding the juveniles of the

present year is none too favorably expressed in the foregoing estimate. On several occasions which have come under my personal knowledge, the fields for the important stakes have undergone a thorough and critical inspection from expert judges, and the impressions been invariably and unanimously complimentary.

Tommy Atkins (imp. Masetto—Que-sal), Bonnibert (Albert—Bonnie Ola), and Irritable (Iroquois—Toribera) have already been mentioned as the principal stake-winners at Morris Park, where also Mr. Arthur Featherstone's Black Fox (imp. St. George—Marie Jansen) showed remarkable speed and class upon the occasion of his only appearance. At Brooklyn and Sheepshead Bay, however, we may fairly describe high-class honors as won by Hon. W. C. Whitney's Prince Charles (imp. Loyalist—Yorkville Belle) and Elkhorn (Belvidere—Elkhorn Lass), Messrs. Fleischmann's Blues (Sir Dixon—Bonnie Blue II.), Mr. C. Littlefield's Watercolor (imp. Watercress—Sabrina) and Sweet Lavender (imp. Goldfinch—Lydia), and Mr. B. F. Clyde's Dublin (imp. Atheling—Wild Honey). Mr. G. B. Morris's Golden Age (imp. Golden Garter—Nonage), Mr. R. T. Wilson, Jr.'s, The Parader (Longstreet—Pretense), and Mr. Whitney's Holstein (Hanover—Anna Gray) appear to also deserve mention as among the thoroughly good performers at these courses; while the Messrs. Keene's Olympian (Domino—Belle of Maywood) and Mr. W. M. Barrick's Criterion (Faraday—Alta Blue), although suffering defeat upon each of their respective debutant appearances, gave promise of eventually developing into winners of really high class.

The Sheepshead Bay meeting, however, introduced what is probably "the two-year-old of the year" in Mr. James R. Keene's Commando, a son of Domino and Emma C. The present conditions of juvenile racing are singularly different from those which prevailed a decade or so ago. Then it frequently happened that the colt of the year was not developed until well along in the summer, during the extended meeting at Monmouth Park, New Jersey. Salvator and Potomac may be cited as prominent examples of this. In later years, however, the earlier stakes have been increased in value and importance, and so it is not surprising that such

as Domino, Requitel, and Hamburg, for instance, were early seen with "colors up."

Thus it was, too, that Commando made his debut in June at Sheepshead Bay. I shall never forget the impression which he then made upon me. The nearest approach to it had been my first sight of El Rio Rey, in 1889, but, while "El Rio" impressed one as being more like a formidable three-year-old than a juvenile, Commando is for all the world like a really tremendous four-year-old. Standing fully 16.1, he is of such admirable racing pro-



Bonnibert.

portions and symmetry that his tremendous size and muscular development are hardly appreciable until he is seen in company with other really large two-year-olds, all of whom he simply "looks like carrying," as our English cousins would put it. As a matter of fact, Commando is out by himself in individuality among all the stake-winners which I have been considering, although they in themselves compare favorably in class, as has been said, with the juveniles of almost any year of our history. This surely prepares the way for the statement that Commando holds a remarkably high place in my estimation, and hence I may as well add to this the expression of my belief that no two-year-old upon earth is to-day his equal, let alone his superior, and that few champions of any preceding year the world over have equaled or exceeded his superb class.

Commando will probably go to England, whither Prince Charles has already preceded him. Both are of really high class, and Mr. Whitney's rangy colt, it is to be hoped, will not ultimately suffer from having been raced early at both Morris Park and Gravesend. There is considerable dissatisfaction among the

general run of American turfmen because colts of this class are occasionally sent across the water after showing high form here. As a matter of business as well as sportsmanship, however, who can justly blame their owners for trying to win with them the more valuable as well as internationally honorable events which England's turf offers, and which have so feeble a parallel at home? Were our own conditions revised, with less money offered for the two-year-olds and more for the seniors, these foreign campaigns might eventually be greatly curtailed, if not entirely abandoned.

The Western division of the American turf may be said to present somewhat better conditions of two-year-old racing than the Eastern, if only in the fact that the value of the Juvenile prizes does not so thoroughly outdo the others. This applies with most force to the "Middle West" division. In California, however, they have two-year-old racing far too early in the season, and it was to me most exasperating to read of Mr. B. Schreiber's flying filly *Sofala* (Balgowan — Apozea) being sent out for a long sequence of races before May 1, actually beginning her racing career on January 6! This early forcing of two-year-olds is the worst result of the winter and spring racing season on the Pacific Coast, and it is a tendency of the turf which is to be viewed with feelings of unmingled regret.

The Middle West is not without sin in this direction, for the youngsters are early at work at New Orleans. As a whole, however, this division of the American turf is to be complimented upon an evident disposition to make more of three-year-old than two-year-old racing, and its tendency toward Derbies rather than Futurities is thoroughly commendable. As a matter of fact, however, the two-year-olds are even here raced too frequently; but, after all, this is a matter which will be properly regulated only—if ever—when a single National Jockey Club shall awake to the seriousness of the

situation and enact suitable turf legislation, based mainly upon English lines. In France no two-year-old is allowed to face the starter before August 1, but this does seem a little too restrictive. Possibly May 1 would be a very beneficial compromise upon which we Americans might agree, for, after all, our English cousins appear to let their youngsters start their work a little too early, at Lincoln in the last week of March.

As to the best two-year-olds of the West, a close observer and thoroughly good judge expresses, in a personal letter to me, his preference for Mr. C. H. Smith's *Garry Herman* (imp. *Esher*—*Silk Gown*), Messrs. C. G. Bennett & Co.'s *Miss Bennett* (*Russell*—*Memoria*), and Messrs. J. W. Schorr & Son's *Silverdale* (*Faverdale*—*Golden Rod*), *Alard Scheck* (*Hindoo*—*Cherry Blossom*), and *Lady Schorr* (imp. *Esher*—*War Mantle*). "The best lot the West has had in ten years," is his dictum concerning the juveniles of 1900 in that section, and it is therefore an apparently reasonable conclusion that the American thoroughbred is in no way looking back.

It is not easy to conclude this imperfect

consideration of our two-year-olds without regretting that it has been necessary to write so much which savors of criticism and dissatisfaction. In the spirit of true love for the thoroughbred, however, no other course is possible. As was written at the outset, two-year-old racing—properly conducted—means simply the threshold of a horse's career, but with us it is too often the occasion of his most frequent appearances and greatest exertions. The tendency of these last few years is to go no further in this direction, however, and I happen to know that more than one turf official in high station regards the matter as being fully as serious as I have described it. It surely seems reasonable to hope, therefore, that the day is coming when needed and welcome turf legislation shall put the racing of two-year-olds in America upon a proper and beneficial basis.



Sweet Lavender.

THE SPORTSMAN'S VIEW-POINT.

By Caspar Whitney.

In several counties, and in some States, the killing of woodcock and shore birds is legally permitted in this month; but in those States where protective legislation is intelligent and sympathetic, these birds, together with "quail," grouse, pheasant, "prairie-chicken," and partridge, are protected for another month; that is to say, until September 15th at least. Meantime, people who eat these birds aid the game butchers and defeat the efforts sportsmen throughout the country are making to provide needful protection for the disappearing wild bird and animal life of America.

Popular Ignorance Concerning Game Protection.

There is nothing so frankly revealing the state and breadth of general ignorance on the subject of game protection as the idea, prevailing in many quarters, that the protection of wild animal and bird life is based on reasons purely sentimental, or is a movement which in some way redounds to the especial advantage of the sportsman.

True it is that the making of game laws and the creation of a sentiment favoring the proper protection of wild animal and bird life have become facts through the ceaseless efforts of sportsmen. That, however, is only because the sportsman, using the term in its highest sense, is a superior man in both the keenness of his perception and in the quality of his sentiment. He is stirred by the beauties of nature, and actuated by the love of fair play for the "free people" of the earth. The gun and the rod are not necessary to sportsmanly instincts. Every man with wholesome humane sentiments is a sportsman. The love of birds should be a part of kindergarten instruction.

The Short-sighted Farmer.

All men are concerned in the protection of bird and animal life, and in the preservation of our forests, whether or not it interests them. And there is no class whose material prosperity is so intimately connected with game protection as the farmers, who, stubborn enough in their darkness, are the most persistent enemies of righteous protective legislation. Usually the farmer is actuated by unreason-

ing stupidity, but oftentimes he reveals a vicious opposition that is hard to explain except on the count of crass ignorance. There is a type of farmer who looks upon all protective and preservative legislation touching our fauna and flora, as a direct and impertinent curtailment of his personal liberty by "them city fellers."

I have been amazed by letters I have received from the West—Iowa, to be particular—telling me of instances where farmers had actually organized parties and gone afield early in the season, killing the half-grown birds, so that there might be none left for the "city fellers" when the legitimate season opened!

O dull-witted yokels, not to know that you were injuring none so much as yourselves!

The preservation of the forests means undiminished rainfall, and even crops; the protection of wild bird and animal life distributes among the country folk, directly and indirectly, thousands of dollars of which they would not otherwise reap the benefit. The protection of insectivorous birds, for example, is absolutely necessary to insure satisfying returns in the orchard and garden. Statistics prove that in those sections where protection is least, fruit is worm-eaten and poorest.

As for the gulls—simple, economical considerations make it almost imperative that they be saved; they are the scavengers of our harbors, and of incalculable sanitary value.

Indeed, it may be accepted as a general rule that invariably there is sound judgment back of a proper sentiment.

Long Island
a
Pot-Hunters'
Haven.

Yet, with these convincing facts ever before them, it is remarkable how slowly needed legislative protection makes its way. What with the yokels, and the politicians, and the gunners who go afield merely to "kill something," sportsmen have a constant struggle, not only to make new laws, but to enforce and better the old ones.



Photo by N. L. Stebbins.
Malcolm Whitman,
U. S. Lawn Tennis Champion.

The indifference, active or passive, of the untutored bucolic savage may be at least partially comprehended, but how are we to understand the indifference of intelligent and educated communities?

Take Long Island, for example; perhaps no section has a higher average of intelligence, yet none seems more indifferent to the protection of its bird life. On the other hand, Long Island has a back-country native settlement which is probably unequalled for its mental density. The latter class appears to dominate, because the intelligence of the island concerns itself only with its polo, or its lawn tennis, or its golf, or its club. As a result, Long Island, at the very center of American intelligence and culture and

progress, is far and away the most backward in the protection of its woodlands and wild animal life of any section in the United States where intelligence rules; and there are but few of the outlying districts of this great country that exhibit less regard in this particular.

As a pot-hunters' retreat, Long Island is a field of exceptional promise and popularity; but as a community safeguarding its birds and trees, it is a shameless failure.

You may in Long Island kill ducks in the spring, woodcock in midsummer, and shore birds, considerably before the legitimate season in States where legislation is both intelligent and sympathetic.

Record Fisherman. It has been with great gratification and joy that sportsmen have noted, in the angling season now drawing to a close, the lesser prominence of that offensive creature, the record fisherman. He is another type of what is homely called the "game hog." He is, indeed, several varieties of that repulsive beast, each more virulent than its fellow.

He is by no means an extinct species, but there is much to be truly thankful for in the fact that he is diminishing in numbers, as every succeeding season attests. And I am quite convinced that the refusal of the higher-class sport papers to give publicity to unsportsmanlike exploits has, more than anything else, influenced this decrease.

Formerly these big catches were written up and published far and wide—sometimes to advertise certain sections, more often to gratify the thirst for individual notoriety. But improvement in this respect is marked. Not that there are no record fishermen left, but they are growing fewer, and meanwhile they are outlawed, just as are the pot- and the mug-hunters.

Even the railroads have largely ceased to announce big catches at resorts along their lines, and are exerting thereby a tremendous influence for the good.

The Gentle Angler and his Delusion. I am always amused by the serious mien of anglers and the learned talk they permit themselves whenever and wherever the fly, with its innumerable variations, comes under discussion. According to the public ut-

terances of the angling seer, for every one of the countless varieties of the fly the fish has a distinct humor, and the conditions an appropriate setting. But, between ourselves, this statement may be classed as largely good-humored, harmlessly intended buncombe.

As a matter of fact, there are about a dozen standard flies that are really all the average angler need ever think of carrying, despite the many of fancy and attractive tying.

Speaking broadly, the killing quality of the lure depends on atmospheric conditions, size of fly, and its manipulation; it being always remembered, as a basis, to use a bright fly on a dark day, and a dark fly on a bright day.

Record of American Athletes Abroad. The athletic invasion of England and France, beginning at the English championships and ending at the Paris Exposition games, was a triumphant tour for the Americans from first to last. In the aggregate, the several American teams represented the very best of our athletes, and their success was not unexpected.

In London they won eight of the thirteen English championship events; in Paris, out of twenty-four scratch and so-called world-championship events, America won eighteen, England four, Hungary and France one each. The American athletes, in a word, except in the quarter and half and distance runs, out-classed all those with whom they came into competition. This was not surprising on the Continent, but in England we had looked for closer contests.

True, the American team, with such performers as Kraenzlein, Tewksbury, Duffey, Jarvis, Long, Boardman, Prinstein, Ewry, Baxter, and Johnson, was one of exceptional strength—such a one, indeed, as is not to be gathered every year, even in the United States. But even with men of lesser prowess, America must still have proved an overwhelming victor, for the superiority of the style and form of our representatives was entirely convincing of American pre-eminence in track games. England's poor showing, in plain fact, was something of a revelation, and it looks as if the betting evil, and the low ethical status which has prevailed in club athletics for so long, were finally

sapping its vitality. Oxford and Cambridge represent the best of English athletics in performance and in amateur status. Club athletics are neither prosperous nor entirely wholesome.

In this connection, I resent, as utterly unjust and in most offensive taste, a very sly but perfectly obvious insinuation, in the English paper *Land and Water*, against the amateur status of the American team. When it comes to viewing the conquerors of vanquished English athletes—which means America—the athletic editors of *Land and Water* and the *Field* invariably disclose an astigmatic eye.

What a pity it is that the Englishman, who is such a thorough sportsman in so many respects, should permit his press, on almost every occasion, to write him down as a very bad loser!

England's Athletic Somnolence.

Outside of the universities, English athletes are especially poor in field events: many club grounds have no



Photo by N. L. Stebbins.

Dwight Davis,
Defeated by Beals Wright at Newport.

hurdles or jumping pits for the pole-vault and high jump; there is not this season an English high-jumper to do 6 feet; a shot-putter to reach 40 feet; a hammer-

thrower to excel 115; while in pole-vaulting, although allowed to climb the pole, none has beaten 10ft. 6in. Two men—Vassall and Leggett—have done 23 feet in the broad jump, but all the rest are not good for more than 22 feet. If it were not for Ireland—with its famous trio, Horgan, Kiely, and Newburn—British field figures would be but little above mediocrity. Their sprinters are barely first-class, and, although they have one or two really good middle-distance men, the average is far below that of America. In distance-running, England is pre-eminent, and this is largely explained by the popularity of cross-country clubs.

**Why
America
Defeats
England.**

Although England's secondary position in track athletics is due not so much to retrogression as to American improvement, yet it is also true that England has literally stood still.

Nor can America's present superiority be accounted for by the usual English explanation—that "Americans make a business of their preparation for sporting contests." As comparing English and American university athletics, that explanation is true; but as between American and English club athletics it is not sound. On the contrary, English club athletes, in many instances, make athletics so much of a business that they are managed by book-makers; some devote practically their entire time to preparation; all of them employ every means at hand in fitting for contests. And what I am here writing is not second-hand information, but the result of personal study and investigation in England.

No; it is not that America makes a "business" of her athletic preparation, but it is that England does not know how. Now, ignoring incidentals and details, and cutting straight to the heart of the question, the basic reasons for this are two: (1) Englishmen are inherently slow; (2) they are sure they "know it all." They are strong, persistent, thorough, courageous—qualities that long have kept them the superior race across the Atlantic; but in the American they encounter an opponent who not only has all these qualities, but has also, in addition, alertness, *finesse*, mobility. Splendid courage and dogged plugging are not of themselves sufficient to scoring on either the athletic or the battle field.

The national temper which puts a stiff non-revolving handle into the hands of the 16-pound hammer-thrower is the same which uselessly silhouettes its officers against the sky-line as pot-shot offerings to the enemy's sharpshooters. Both are a needless sacrifice of power and skill and material, and in neither case is the game being played adroitly or to the full of the contestants' strength.

In his respect for orthodoxy, the Englishman is really a fanatic.

**Broken
Faith
at the
Paris
Games.**

There is no occasion for surprise at the wretched management of the Paris games; it was quite to be expected, and must have been foreseen even by those in whom the idea of the games as an advertising medium ruled strong. Yet the bad faith exhibited by the French Exposition Committee, it must be acknowledged, came as a shock. It was adding insult to injury. That the American officials were none too careful in their preliminary scrutiny of the conditions under which the games were to be held, has become apparent. There is no doubt that the prospect of a Paris junketing was, as our distinguished fellow-countryman Vance Thompson would say, "sib" to their souls. It seems now that the American representative had seen but two members of the Committee when his cable, that there would be no Sunday games, allayed disquietude on this side, and enabled all the teams to set sail.

All, save the Pennsylvania, Georgetown, and New York Athletic Club teams, had been definitely instructed by their faculties, before sailing, not to participate in Sunday games. That Georgetown and the N. Y. A. C. teams were not so instructed is not surprising—indeed, we should have been quite astonished had they been so instructed; but the failure of the Pennsylvania faculty to act with Princeton, Syracuse, Chicago, Michigan, in this particular, provides both surprise and disappointment.

To stand with Georgetown and the New York A. C. in not forbidding Sunday competition to its athletes is a record that can provide no very gratifying reflections for Pennsylvanians.

Having arrived in Paris, the Americans exacted a promise from the French Committee (after the latter had previously made and disregarded an agreement

for no Sunday games) that the Americans would be permitted to make their trials on Monday in events scheduled for Sunday. But this promise also was broken.

As for the track management, its like has not been seen outside of picnic games. The starting was ludicrously poor; the spectators swarmed over the track and around the contestants in the field events, frequently obscuring the view of the grand stand. The prizes were disappointing, being, instead of the "works of art" advertised, decidedly inartistic bronze birds, silver pins and studs, walking-sticks, knives, and that sort of thing.

Of course the prizes should have been medals.

**Improved
Club
Rowing
Form.**

The regatta of the National Association last month on the Harlem River Speedway course provided some very satisfying evidence of the improvement in form which is gradually making its way in club rowing. And yet it prompted the reflection of how resolutely Americans neglect their rowing opportunities.

The entry list fairly represented the Eastern rowing section (although only one pair was down for the double sculls); but, with the exception of Detroit, the great West was unrepresented, while only a single came from New Orleans. The indifference of the West to rowing is somewhat curious, and quite inexplicable when its great natural advantages are considered. Among Chicago, Milwaukee, Minneapolis, St. Paul, Duluth, there should be, it would seem, judged by the opportunities afforded; popular annual regattas and a widespread boating spirit. Then, too, there is the entire Mississippi River section, and scarcely enough competitive boating life to give it name.

Perhaps the Pacific Coast is as dull to its rowing opportunities as any other section. San Francisco and Oakland have a little Sunday rowing—largely by the class which supports Sunday picnic games, but at Portland, Seattle, Tacoma, Vancouver, there are unexcelled facilities, and yet the sport barely exists.

At New Orleans are quite a half-dozen clubs, and considerable local enthusiasm, but it never bubbles over into an outside regatta; which is passing strange considering the frequent opportunity during every season, and the splendid practice course the local oarsmen enjoy.

**Encourage
Sectional
Regattas.**

With all these natural advantages, it really is unaccountable that more activity does not result. There is more activity now than was apparent, say, a dozen years ago, but it grows so slowly and so erratically that only a careful student notices it. In some sections the interest has diminished, in others it has increased. For this reason I am opposed to making the splendid Speedway, or any other course, the permanent one for National regattas, as I note has been discussed. There are four courses in this country—New York, Boston, Philadelphia, Detroit—which are unexcelled, and fairly represent the present active rowing sections. And it is by alternating the site for the annual regatta that much good is done the sport.

England is cited, I see, in their support by those seeking to have a permanent course; but the conditions of the two countries are totally different.

All rowing England practically boats on the Thames, or centers at London; while, in this, country, there is no rendezvous common to all rowing clubs. The surest way of developing the rowing interest is by encouraging sectional regattas.

**American
Oarsmen
at Paris.**

The Vesper eight which, at the National regatta, won the right to represent American club rowing at the Paris regatta, the last of this month, is the first club eight to



H. R. Barrett.

A. W. Gore.

E. D. Black.

International Lawn Tennis.
The Defeated Englishmen.

have gone abroad since the Atalanta four raced the London Rowing Club four on the Thames in 1872, and were beaten. The Vesper eight is a much better crew than was the Atalanta four—in fact, a more skilful representative of American non-university rowing could not be sent. The crew consists of Edwin Hedley, bow; Edward Marsh, No. 2; Roscoe C. Lockwood, No. 3; William J. Carr, No. 4; John F. Geiger, No. 5; James B. Juvenal, No. 6; Henry De Baecke, No. 7; John Exley, stroke; L. C. Abell, coxswain. The men are veterans, the majority of them scullers, and all American-born. The crew has won five races this year, and has never been defeated; its blade work is good, but its body work rather poor. However, the crew's watermanship is excellent, and the men get their power on together. I doubt if any English crew of merit will be found in the Paris regatta, but the Vesper crew should give a good account of itself against the Dutch and French crews; there are very few amateur French crews, and the Vespers would better look up carefully the status of their opponents.

**What's Bred
in the Bone
Comes Out
in the Flesh.**

That was a rude shock the National Association gave "amachoor" boating circles the other day when it refused to provide ex-champion sculler E. H. Ten Eyck with one free ticket to the Paris Midway for "father and friend."

Ten Eyck entered and won the Paris singles race at the Association's Speedway regatta. He thus earned the right to represent America at the Paris international regatta, and, at the same time, incurred an obligation to go. Subsequently, as the price of fulfilling his obligation, the young man demanded that his father, the professional oarsman, and his friend Lewis be given transportation to Paris; his father as trainer, and his friend as partner for a double-scul event.

Now, strange as it may appear to the Ten Eyck family and to their local rowing club, which seems to take itself very seriously indeed, the Association is to be congratulated on the absence of young Ten Eyck from its Paris crews. American rowing is better served by oarsmen more amateur in spirit, if of less skill.

Having fouled Rumohr and destroyed his chances in the Paris singles event, he

declined to give the Canadian the satisfaction of at least another meeting in the champion singles, which Rumohr won by default. In '97, Ten Eyck remained out of the National singles, in which Maguire was the formidable opponent, and subsequently the sporting columns of the Boston papers teemed with a Ten Eyck-Maguire match, which was repellent with professional ear-marks.

Of his being a gifted sculler there is no question, but every move he makes suggests the professional atmosphere, in which he was born and has his being.

The Association should, without hesitation, discipline Ten Eyck by a period of suspension. Sportsmen are thoroughly disgusted with him. On several occasions his course has been so aggravating, and his spirit so manifestly professional, that it will be a relief when he enters, as no doubt he finally will, the professional ranks, to which he was born. He is not the kind of an amateur to benefit sport, and the sooner he is pilloried the better for rowing.

**No
Champion
with a Bar
Sinister
Wanted.**

Immediate action must be taken by the National Association to either allay or to prove the suspicions which reflect upon the amateur status of the sculler Rumohr. It is due not only the oarsman in question, but the Association itself, that prompt measures be adopted; especially since the attitude of the Association Executive Committee has been somewhat strange and inconsistent.

Rumohr is a Canadian, who came comparatively recently to New York and joined one of the Harlem River clubs. Twice before coming to this country, his entry for the Dominion championship had been rejected by the Canadian Rowing Association. Ordinary courtesy, if not regard for the purity of its rowing, should have prompted the American Association to indorse the Canadian body's action. But neither courtesy nor precaution prevailed, and Rumohr's entry was accepted from the Harlem club, and he won the singles through Ten Eyck's failure to make good his entry.

Thus it happens that the American amateur champion sculler is neither American nor, so it is said, amateur.

It may, to be sure, transpire that Rumohr's own home organization is prejudiced and the report false; on the other

hand, it may be that the Canadians, to whom haste is foreign, had excellent reason for rejecting their oarsman.

At all events, Rumohr's status must be determined without delay. We want no tainted American champions.

**Bearding
the Lion
in his
Den.**

It was a very ambitious schedule the Haverford College cricket eleven undertook on its recent English tour, and, it must be acknowledged, the Americans carried it out to the end with credit to their play and general conduct. Not that their playing record was particularly brilliant, but it was good, commendable work for the most part. There was some hard luck, some good luck; some especially clever play, and some rather mediocre. On the whole, it was a stronger eleven than that which last went over (in 1896), for, though it had no Lester, yet it maintained a better average of performance.

The team included W. S. Hinchman, captain; F. C. Sharpless, W. W. Justice, C. C. Morris, C. H. Carter, S. W. Mifflin, C. J. Allen, L. W. De Motte, R. H. Patton, A. C. Wood, D. A. Roberts, W. V. Dennis, and J. B. Drinker and F. W. Sharp as substitutes. Of these, Hinchman, Sharpless, Morris, and De Motte have given especial promise in their play on this side. Sharpless and De Motte are bowlers of much judgment. The eleven played fourteen games, winning three, losing five, and drawing six. Among the drawn games were ones with Eton, Oxford, and Cambridge—the latter a very lucky one; among defeats, that administered by Harrow was the most decisive. Undoubtedly, the most satisfactory game of the tour was the triumph over the Rugby Public School eleven.

**Itinerant
Amateurs
Need Not
Apply.**

The proposed visit next autumn of an English cricket eleven, under the captaincy of the well-known S. H. Wood, has been abandoned, but sportsmen will be infinitely pleased to learn that arrangements were making on a different plan from that usually pursued. Hitherto, visiting cricket elevens have had their traveling expenses and their keep, including laundry and refreshment, provided by the Americans. This trip, however, was to be on an amateur sportsmanly basis.

With all his native shrewdness, there is no man on earth who pays so much for

his whistle as the American; and there is no one quicker to let him pay than the Englishman.

When American teams go abroad, they pay their way; whenever English teams have come here, we pay the bill.

Is it not about time to adopt as our national sporting anthem that popular music-hall refrain, "When you ain't got no money, you needn't come around"?

Aside from the expiration of our patience at being a "good thing" for all comers, the practice of expense-paying perverts the amateur spirit, and seriously menaces the integrity of home institutions.

The recently published proposition of the Polo Association to pay all the ex-



Viking, Winner of the Toledo Yachting Association Championship Flag, 1898, 1899, 1900.

penses of an English polo team's trip to this country was distinctly contrary to the amateur spirit.

That it failed of fruition is a subject for congratulation.

The Polo Association should include an ethical guide-book in the library of its Executive Committee; it erred not only in ethical, but in commercial sense as well, since it has not money enough to provide its own prizes, much less pay the expenses of an English team. A few of its wealthy members would have supplied the funds, as they do a majority of the

cups, which, in the former case, would have been entirely contrary to the ethics of amateur sport. It is eminently proper for sporting associations, or clubs, to entertain visiting sportsmen, once they have arrived; but it is not fitting that clubs, or associations, should pay their traveling expenses. Such a proposition ought to be as offensive to the men invited as it is to sportsmen generally.

Pool-
Room
Element
Triumphant.

The horse racing of the season thus far seems to indicate with unfaltering directness that the Jockey Club has much to do if it would merit the trust it has sought of sportsmen. The in-and-out performances on several tracks, and especially at Brighton, of horses of well-established form are not to be explained by varying conditions of the tracks, or even by the uncertain tempers of the animals themselves. A careful comparative study of results of the running on the tracks where the Brooklyn, Suburban and Brighton handicaps were decided, appears to leave room for no other conclusion than that the pool-room element was a most influential factor in the day's work. Yet it is true that less scandal than usual marked the meeting at Brighton, though the improvement cannot be attributed to the alertness of the Stewards in charge.

It will be impossible, I suppose, to entirely cleanse horse-racing of fraud; Utopia is not to be found in this direction any more than in any other field where men seek to gather in the nimble shilling. Whatever there is of sport in racing, as presently conducted, is supplied by tradition and environment; the actual racing is quite as much of a business as the grocery or dry-goods trade; and, perhaps, there is no more fraud in one than in another. Where the making of money is the dominating factor, it is safe, although unhappily, to say that intense cupidity will prompt fraud among the weak or the

vicious dealers, whether they trade in nails, candles, or horses.

Parenthetically, let me add, that very fact explains why the friends of amateur sport will ever fight to the very finish any suggestion of the dollar in connection with amateur games. The jingle of the shilling is the death-knell of the amateur.

Jockey
Club
the
Racing
Clearing
House.

But if racing is a business, as we must realize, and some fraud to be expected, as is admitted, at least it can be as carefully supervised as a company in trade, or as honestly conducted as a game of faro. At present, it appears to have neither the able management of a house in commerce nor the square deal of a professional game of chance.

This is both unnecessary and unwise; no business really thrives for long on dishonesty. Dishonesty works out very much like the average man's betting: there are times when he makes quite a winning; but figuring results at the end of the season discloses a balance on the other side, and in very many cases he is bankrupt before the season is half over. It does not pay. Really, no one with the ordinary sense given the average man imagines it does pay. The dry-goods house fails; the trainer loses employment; the jockey is set down; the amateur is disqualified; the man is disgraced.

Now, the Jockey Club stands before the public as the racing clearing house; its rules govern the racing, and its Stewards are in attendance every day to insist that the conduct of the business be creditable.

The Stewards, therefore, are the sponsors for the honesty of the performances.

There is no gainsaying the fact that this season, at least, has revealed some very gullible or reprehensibly complaisant Stewards. With Mr. James R. Keene in England, there seems none in the Jockey Club strong enough, or caring enough, to treat more boldly with the vicious elements. And, for this or other reasons, the club appears recreant to the trust it sought and received from sportsmen.

Innocence
Abroad.

This seems to be a great year for America on the other side. Our athletes have just concluded the finest exhibition in track and field games the world has ever seen. "Tod" Sloan and "Johnny" Reiff have outrid-



"Johnny" Reiff.

den all the English jockeys; Germany is buying our horses for her army in China; England has sent shipload after shipload of our mules to South Africa; Japan is introducing our trotter blood; a fine fleet of American yachts relieved the gloom of Cowes Week; and the other day, it is reported, Messrs. James R. Keene and John W. Gates plunged on Royal Flush, owned by Mr. J. A. Drake and ridden by "Johnny" Reiff, and Americus, owned by Mr. Richard Croker, ridden by Lester Reiff, and plucked the book-makers to the tune of a quarter of a million dollars!

There are occasions when we do not seem to be so "easy."

Summer Horse Shows. Although the open-air shows of the Atlantic coast are, as a rule, chiefly concerned in providing a sales ring for the dealers, and a pleasing spectacle for summer residents, yet there are a few distinguished exceptions—notably Philadelphia and Newport—and at all the average quality of the horse continues to advance. It is little short of the remarkable to what extent these sectional shows are answerable for the betterment of horse-flesh and the spread of knowledge concerning form generally. Therefore, let us not despise the summer show, even though it be "swept by ocean breezes" and the coachmen disport in leggins and cockades.

But the real outdoor shows are West—where, in general, and in Missouri in particular, may be seen less form, I admit, but some of the sweetest horse-flesh in all this country. We of the East have no idea of the number and quality of these shows throughout the country.

Combination for Good Roads. Apropos of horse shows, I read in the *London Mail*, not long since, that about "four thousand people, mostly Americans, traverse the whole of Great Britain annually in coaches." Why do not some of these Americans do a part of their coaching on this side? If the coaching men will make common cause with the automobile and bicycle interests, it will mean a great deal for American roads.

It is amazing how much has been accomplished by the bicyclists alone; literally, hundreds upon hundreds of miles of poor roadway have been made first-class by grading and draining, or macadam, or asphalt. From one end of the

country to the other the improved roads bear witness to the good work the League of American Wheelmen has accomplished. It may be judged how much more could be done if there were union of effort by all those particularly interested in having good roads.



E. H. Ten Eyck,
Ex-Champion Sculler of America.

Canada's Successful Defense of Small-Boat Championship.

The most satisfactory feature of this year's race for the Seawanhaka small-boat International Challenge Cup was the absence of fluke in the sailing, and of dispute in the final decision. It is the first race to have gratified American sportsmen—despite its result—in several years. The White Bear Yacht Club, the American challenger, is the leading organization of Northwest inland lake yachting. It has been very successful at home—near St. Paul—and the conduct of its representatives on Lake St. Louis, during the international race, shows that it has developed both sailormen and sportsmen.

Minnesota, the challenging boat, was the choice of three and much trial sailing; she is 36ft. 6ins. length over all; 25ft. 7ins. l.w.l., with a sail area of 499ft. 6ins.

The Royal St. Lawrence Yacht Club defended with *Red Coat*, sailed by Mr. G. H. Duggan, who first won the cup for Canada in 1896, and has held it ever since.

The American boat showed that as a drifter she is a wonder, but *Red Coat*, with any kind of air stirring, proved her

marked superiority. The Canadian boat (which is 39 feet over all and 8 feet beam, with deck pitching both ways from ridge in center), indeed, completely outsailed *Minnesota*, winning the first race by 6m. 20s., the second by 3m. 5s., and the third by 2m. 17s. *Minnesota* was tender, while *Red Coat*, stanch and upstanding, re-



Minnesota, White Bear Y. C. Challenger for the Seawanhaka Small-Boat Challenge Cup, 1900.

vealed especial superiority in beating to windward and in reaching.

Summary of Seawanhaka Cup races:

The cup was first sailed for in '95 on Oyster Bay, where *Ethelwyn*, designed by W. P. Stephens, and sailed by Field, defeated, 3 to 2, *Spruce IV.*, an English boat, owned and sailed by Mr. Brand. In '96, G. H. Duggan designed and sailed the Royal St. Lawrence Yacht Club's challenger, *Glencairn*, and won in three straight, on Oyster Bay, from *El Heirie*, designed and sailed by Mr. Crane.

In '97 the Seawanhaka Club challenged with *Momo*, designed and sailed by Mr. Crane; the Canadian club defended successfully on Lake St. Louis, 3 to 1, with *Glencairn II.*, designed and sailed by Mr. Duggan. In '98, *Dominion*, a double-hulled boat, designed and sailed by Mr. Duggan, defeated Challenger, 3 to 1, designed and sailed by Mr. Crane.

In '99 the Seawanhaka for the third time challenged with a boat, *Constance*, designed and sailed by Mr. Crane, and the St. Lawrence Club defended with *Glencairn III.*, designed and sailed by Mr. Duggan. Each won two legs, and on the fifth and decisive *Constance* ground-

ed her fin before crossing the starting line, and did not enter. *Glencairn III.* had a sail-over and was awarded the victory after much discussion. It was a very unsatisfactory conclusion.

**Americans
Defeat
English in
Lawn Tennis.** The play at Longwood (Aug. 8-10) between an English and an American team for the Davis International Challenge Cup demonstrated that, unless it be the famous Doherty Brothers, England has no lawn-tennis players who can successfully withstand the *finesse* and the brilliancy and speed of the best of America. Quite the most skilled English player who has tried conclusions with Americans at home was Dr. Eaves, whom R. D. Wrenn beat after the former had won the All-Comers at Newport. There was no member of the recent English team nearly so good as Eaves, and no match so interesting as those resulting in the visit of that other team—Eaves, Mahoney, and Nisbet. This year's English team included E. D. Black, A. W. Gore, and H. R. Barrett, ranked officially in Great Britain as fifth, sixth, and thirteenth, respectively. Barrett has been playing for two years under the assumed names of "A. Player" and "J. Verne"—curious performance for an amateur, and stranger toleration by the lawn tennis association. As "A. Player" he beat Clarence Hobart. In doubles, Barrett and Black are the second best in England.

The American team included M. D. Whitman and D. F. Davis—ranked officially first and second—and H. Ward, who, with Davis, holds the national doubles championship. The conditions of the tournament provided that the cup go to the team winning three out of five matches, four of which were to be of singles and one at doubles.

**Whitman
and
Davis in
Great Form.** With the exception of the match in doubles, the play was so overwhelmingly in favor of the Americans as to be nearly uninteresting. Even the doubles needed the international flavor to furnish entertainment, for in these also the Englishmen were outmatched. Whitman and Gore made the first contest, and the American champion had a very easy time of it, winning in straight sets,

6—1, 6—3, 6—2. Black offered a little, though not an excitable quantity, more of opposition to Davis, who won handily in four sets, 4—6, 6—2, 6—4, 6—4.

In the doubles the Englishmen showed to slightly better advantage, but, as in the previous matches, they were outplayed in every respect, except in hard low driving. The particular in which the Americans showed greatest superiority in both singles and doubles was perhaps in service, which utterly puzzled their opponents. But in placing, in network, in the forcing stroke, in generalship, the Englishmen were simply outclassed. They covered the court well, as all Englishmen do, drove hard, lobbed well, and were steady. But they were simply hard-playing, good, first-class men, and were overwhelmed by the work of such brilliant performers as Whitman and Davis.

Having been beaten by the leading two men on the American active playing list, one Englishman, Barrett, sailed, and Black and Gore went to Southampton to try conclusions with some of the recently revived veterans. But the results were practically the same as at Longwood. R. D. Wrenn and O. S. Campbell beat the Englishmen in doubles, 6—4, 6—4, and W. A. Larned had rather an easy time with Black, 6—1, 6—3. The Englishmen showed very ragged work in the doubles, and Larned's brilliant strokes and generalship were too strong a combination for Black.

Gore, however, took his revenge out of Richard Stevens. The Englishman is the strongest back-court player in Great Britain, and Stevens has long enjoyed similar distinction in America; so the match was interesting—for a time. Not for long, however, as the Englishman put so much steam in his drives to the base line that Stevens could not handle them. Gore really outclassed his opponent and won easily, 6—1, 6—1.

Return of the Veterans. The month's play previous to Newport was made notable by the reappearance of several of the veterans; and yet none showed form calculated to menace the chances of D. F. Davis or Beals Wright in the All-Comers. The Longwood tournament is always interesting, and this year it was particularly so in exhibiting the best play Whitman, Davis, and Wright had shown up to that time, and provid-

ing a very clever doubles match for the Eastern championship between Whitman-Davis and Hackett-Allen, which the latter pair won, 5—7, 6—2, 6—8, 8—6, 6—4.

The week's play likewise proved beyond peradventure the superiority of Whitman, Davis, and Wright over all other men now playing. W. A. Larned reached the semi-final round—after a narrow escape from defeat by J. A. Allen—to be beaten by Wright, 6—4, 7—5, 6—4.



Photo by W. Notman & Son.

Redcoat, Canadian Winner of the Seawanhaka Small-Boat Challenge Cup, 1900.

G. L. Wrenn, Jr., after beating Leo Ware and R. D. Little, was defeated by Davis, 6—3, 10—8, 6—3, who also beat Malcolm Chace, 6—4, 7—5, 6—4. Finally, Davis beat Wright, 3—6, 6—2, 6—3, 6—4, and was defeated by Whitman, 6—3, 3—6, 6—2, 6—3. The tournament revealed the genuine 1900 ranking of the players.

At Southampton other veterans came out from retirement, and the surprise of the year was furnished by R. Stevens's defeat of ex-Champion R. D. Wrenn in the semi-finals, 2—6, 6—1, 6—4, the match incidentally showing how much the latter has gone off his game, and how well the former maintains his form. Another shock was the defeat—3—6, 6—2, 6—1—of O. S. Campbell and R. P. Huntington (one-time national doubles champions) by Sumner and Samuel Hardy. These California players have done some

very good work in doubles during their Eastern visit, but are not in the first class. They lost the doubles at Southampton to Allen and Clothier—a fairly good team; Sumner was beaten by J. D. Pell, who beat Huntington, and lost finally to Larned, and Samuel was defeated by G. L. Wrenn, Jr.

Perhaps the best game the Hardy Brothers have shown was in their defeat of Hackett and Ward, 3—6, 3—6, 8—6, 6—1, 6—1, at New Castle.

Golf and Women. The wonderfully beneficial effects of golf are already noticeable in American women. They are getting bigger and broader, with firmer and more pliant muscles, an easier carriage, and a greater capacity for fatigue. In this respect, the change wrought by golf within eight years is remarkable. It is a mistake to suppose that the Western woman is, generally speaking, as a rule, so athletic or healthful as her Eastern sister. She is not. Until times wholly recent her conditions of life were much harder. She had less leisure and less inclination for the open air.

Luckily, however, golf is doing much to change this. Because of the benefits it confers it is a better game for the West than for any part of this country, with the possible exception of the far South, in which section it is spreading with rapidity. Physical good done to the women is reflected in the physical betterment of the following generation, and it is a certainty that the Americans of the future will bulk bigger and will be able to go longer and faster. Because of this it is not unreasonable to regard golf as quite the most valuable of our sports. It seems sure that more women will take part in it than in any other sport to which they are competent, and in the improvement of any species, improvement of the mothers should be the first care.

Notable Golf by Women. The month following the Amateur Championship is usually an uneventful one in golf, but this year is was made notable by two tournaments held for the gentle sex exclusively—one at Evanston, Ill., which disclosed a remarkable young player in Miss Bessie Anthony, who won the Western Championship, and one at Morristown, N. J., which developed Miss Genevieve Hecker, who,

in winning the Metropolitan Championship, defeated both Miss Underhill, the present (1899) champion, and Miss Beatrix Hoyt, the ex-champion. Neither of these young women is past eighteen years of age, and that each has a bright golfing future, if she do not overtax her strength and nerves by too much tournament play, is evident. I am decidedly of the opinion that women, especially very young ones, should be very moderate in tournament indulgence.

All this goes to show how the game has developed among womankind; really, they have averaged greater improvement than the men within the last three years.

The Joined-Hand Golfing Grip. J. H. Taylor, the open champion of Great Britain, and the leading golfing professional of the world, like that other great professional, Vardon, is an advocate of the joined-hand grip. But Taylor's grip differs from Vardon's in overlapping, instead of interlocking, with the little finger. Taylor also uses short and light clubs, all leather-faced, though his shafts are not so short as those with which Vardon plays. Any peculiarity in the form of Taylor will be studied with interest, since there is no doubting his right to the world's golfing championship.



How J. H. Taylor, the British Open Champion, Grips His Club.

The prospective meeting of these two great players in our open championship promises a treat in high-class golf.

Meantime, Mr. Travis continues to lead the amateurs; he made a record at Southampton of 74, which beat the previous amateur record of 77, and approached the professional record of 70.

Otherwise, the general month's play is rather more remarkable for the excellent average of performance than for any especially noteworthy individual effort.

**Disastrous
Sacrifice of
Construction
to Speed in
70-Footers.**

The collapse of the Herreshoff 70-footers in a race off Newport just previous to the New York Yacht Club cruise, and the accidents which overtook the crack small boats in the Quincy Cup series, make the present yachting season illustrious in its examples of the harmful extent to which the trend for racing machines is carrying us.

The experiences of this year should warn yachtsmen and designers that the limit has been exceeded.

As racer-cruisers, such as they were proclaimed to be, the 70-footers *Mineola II.*, *Rainbow*, *Virginia*, and *Yankee* are unquestioned failures; as racing machines pure and simple, they are undoubtedly more success than failure—for, though structurally weak, they are very fast.

But may a 70-footer be declared a success, even as a racing machine, that is so frail it cannot sustain moderately heavy weather without leaking and losing its original lines? What kind of a racer is that whose seams open and bows twist awry where catboats live and sail in evident relish of the weather!

In the race off Newport alluded to, every 70-footer leaked badly, one retired as a result of her injuries, and the bows of two were wrenched and cocked skyward. All were immediately dry-docked, and their bows plastered externally with steel bands, while internally steel wire stays and turn buckles were introduced in the endeavor to supply the deficiencies of unmistakably weak original construction.

Quite the most disquieting phase of this disclosure is the impossibility of attributing the structural deficiencies of the yachts to economy imposed upon the designer and builder by the owners. On the contrary, the owners, Messrs. W. K., Jr., and Cornelius Vanderbilt, August Belmont, H. P. Whitney, and Herman Durvea, are among the wealthiest yachtsmen of this country, and put no restrictions on Herreshoff. That these seventies are structural failures is, therefore, to be excused on no plea of necessary economy. Perhaps it is well the lesson came so harshly—we needed a rude awakening—and the Messrs. Vanderbilt, Belmont, Whitney, and Durvea, through their ownership of these craft, have done American yachting an inestimable service—though

it is a pity equal results could not have been obtained on less expenditure.

**Quincy Cup
Fails in its
Mission.**

The races for the Quincy Cup this year supplied additional evidence of the modern craze for machines, and its accompanying dangers. There were four boats in the race—*Lookout*, the winner; *Hostess*, winner of last year; *Pompano*, and *Tashamoo*. There was never at any time more than a moderate breeze, yet *Pompano* lost her masthead and twice capsized; *Tashamoo* lost her mast, split her deck, and was abandoned as a worthless wreck by her owner; *Lookout* lost her gaff and a portion of her canvas hull skin.

That is a creditable record indeed, in a race for a cup established to promote small-yacht racing!

The Quincy Cup has utterly failed to accomplish its purpose, or, in fact, any worthy purpose. Whether because of the conditions imposed, or because of the general trend, it has thus far at least been the means of producing simply a lot of hideous and useless scows.

The deed of gift should be revised, so as to place a very heavy premium on freak construction.

It must be confessed that the modern yacht-building tendency is by no means satisfactory to genuine yachtsmen. The present fad for racing machines will take the life out of the sport. Its cost is twofold: (1) through the initial outlay for the machine, and (2) because of the machine's short life.

**Plaint
of the
Excursion-
Boat
Yachtsmen.**

It would be a great loss to American yachting were the New York Yacht Club to abandon its annual cruise, and I am one of those who not only believe such a course would be direful, but who also doubt the probability of its happening—rumors to the contrary notwithstanding. It is too disturbing a thought to entertain complacently. The yachting season would be incomplete without a N. Y. Y. C. cruise; we would rather yield any other event on the yachting calendar. Long has this cruise provided the only occasion on which the best yachts of the year may meet under racing and cruising conditions of common fairness. It has been the medium through which each season's new boats have

made their début, and the survivors of past seasons their racing reappearance. It is the event above all others valued and enjoyed by genuine yachtsmen.

And now come some of the N. Y. Y. C. excursion-boat yachtsmen, steam-launch owners, and landlubber members, agitating abandonment of the premier club's premier event! Since, however, several kinds of "yachtsmen" are needed in the domestic economy of every yacht club, I suggest, for the conciliatory diversion of its own peculiar variety, that the New York Yacht Club charter the Central Park lakelet, which floats those lovely swan-boats, and is so rapturously near the merry-go-round.

Competent
Officers,
Sportsmanly
Officials.

The cruise of the New York Yacht Club this year, which began officially with the rendezvous Aug. 6th at Glen Cove and closed with the Astor Cup races off Newport Aug. 13th, was one of exceeding satisfaction. There have been years when the fleet of yachts anchored at the rendezvous was larger, but no cruise during which the general racing throughout squadron runs was more sport-giving. And the club was well prepared to give good sport this year.

Following the advice and example of ex-Commodore Edward M. Brown—one of the most sportsmanly and level-headed leaders the club has ever had—the executive officers—L. Cass Ledyard, Commodore; August Belmont, Vice-Commodore; C. L. F. Robinson, Rear Commodore, and Robert Bacon, Fleet Captain—are all Corinthian sailormen of first quality, and, in three instances at least—Ledyard, Belmont, and Bacon—of national reputation. The Regatta Committee is equally strong, with S. Nicholson Kane, J. F. Tams, and John F. Lovejoy; and the flag officers attended in sailing yachts. There were no long runs, and though the weather for the first three days was light and fickle, yet the closing days provided good sailing breezes.

The patched-up 70-footers were naturally the chief attraction, and flimsily constructed as they are, yet they proved that when the weatherly conditions are not too severe, they are, next to the 90-foot Cup defenders, the fastest things under sail to have been built. *Mineola* went one stretch of seventeen miles in 1h. 48m. 21s.

Evenly
Matched
70-Footers.

So far as the 70-footers are concerned, the honors of the racing throughout the cruise were really very evenly divided among *Mineola*, *Virginia*, and *Rainbow*; but in the Astor Cup race, *Mineola* showed that she is undoubtedly the fastest all-round boat of the four. *Yankee* seems to have suffered more than the



The Vesper Eight, Representing America at the Paris Exposition Regatta.

others from the twisting received in that race off Newport, which so ruthlessly disclosed their structural weaknesses. She has since not done nearly so well. The record for the cruise gives *Mineola* 4 firsts, 3 seconds; *Rainbow*, 2 firsts, 3 seconds, 1 third, 1 fourth; *Virginia*, 1 first, 1 second, 1 third, 2 fourth, once disqualified, and once not entered; *Yankee*, 1 second, 5 thirds, 1 fourth.

Mineola received the Lippitt Cup (for winning the majority of squadron class runs) through *Virginia's* disqualification for clearing a buoy on the wrong side—which in no way affected the result of the race. Really *Virginia* proved to be quite the fastest seventy on that day; so that actually up to the Astor Cup event *Mineola*, *Virginia*, and *Rainbow* had won two races each. *Mineola* also won ex-Commodore Brown's Cup on the return run to Newport.

The cruise served, too, as the first serious trial of *Altair*, *Shark*, and *Sistae* in the 43- to 51-foot class, and of *Countess Hebe*, *Effort* and *Kiorwa* in the under 36-foot class, and of the English sloops *Hester*, *Astrild*, and *Isolde* in the class for 60- to 70-foot boats. But the English boats were beaten all hollow by the seventies, on all points of sailing, especially in reaching and beating to windward. *Sharp* made an excellent record, including victories over the famous *Syce* and *Effort*, but eventually was left alone in the class, although beaten once by *Kiorwa* and again by *Countess*. *Isolde*, in good steady breeze, seems to be the fastest of the English boats. *Quissetta*, and *Corona*—flagship of Commodore Ledyard—although in different classes, sustained interest—which was slight—in the schooners, and the former made the notable record of winning every run in her class. *Corona* was a close second in the Belmont Cup for squadron runs, but she had the weather to her suiting in the Astor Cup race, and beat *Quissetta* handsomely.

The fleet, at no time especially large, yet represented the world's best designers.

Job-Lot Polo Teams.

The tournament at Narragansett Pier, although an attractive diversion for summer residents, cannot be said to have furnished play above the ordinary. Indeed, little else could be, or in fact is, expected—since the teams are made up of whatever polo material happens to drift Pier-wards, regardless of club affiliations or team acquaintance. I write this rather in an explanatory than a critical vein, because the results and the general character of this mid-summer play appear annually to disturb many excellent friends of the game.

This tournament is not to be taken seriously: it is simply good fun, and certainly is excellent individual practice. It is quite usual, in fact, for the Point Judith and subsequent cup play to disclose very brilliant streaks of individual work; elsewhere in serious competitive play, individual is, of course, merged into team work; but at Narragansett he partakes of the exhilarating environment and runs *amok*; he is prone, and is entitled to here throw off restraint and get a run to the full for his money. For these reasons, if for no other, I always enjoy this tournament: it fits in well with the holiday mood—the pe-

riod in which we may relax without creating comment.

Eugene Reynal, R. J. Collier, J. M. Waterbury, Jr., and P. F. Collier, as "Westchester," have made about the best showing of any four; while J. M. Waterbury, Jr., P. F. Collier, Seward Cary, A. E. Kennedy, E. M. Weld, W. A. Hazard, and Allan Forbes individually have been most commendably in evidence.

Sporting Possibilities of the Automobile. Cycle Motor.

Except as a pace-setter in bicycle racing, the cycle motor seems to have made its way with unaccountable slowness in this country. But just now there are indications of an awakening to its sport possibilities, and its popularity will be wide so soon as the manufacturers' experimental period has passed and the price been placed at a reasonable figure.

Automobile racing is, of course, and must always be, confined to the comparative few who can afford it, although the cost of the machines will no doubt decline 50 per cent. within five years. Besides which, it will be years before the roads in this country permit of long-distance automobile racing, even if public sentiment did not very properly veto high speeding over common thoroughfares. Therefore, I question seriously if the automobile will ever attain to racing popularity in America; though for touring it is, or will be when perfected, a favorite.

For racing in this country a machine must be suited to track work, and in the cycle motor are combined both track-racing and road-touring possibilities.

Though the cycle motor is sure to find favor, I am confident the bicycle will continue to hold its own, because it provides the personal element in propulsion which neither of the others supplies, and which many of us seek.

Sharper Cycling Supervision Needed.

The National Cycling Association, which has succeeded to the League of American Wheelmen in racing control, would better look sharp if it hopes to retain the confidence of sportsmen. The character of some of the Eastern racing, and the unsavory reputation of track management, require the most drastic official treatment the Association has at command. The N. C. A. cannot afford many such scandals as that arising from the Vailsburg track.

THE PARIS ATHLETIC GAMES.

LEAVING aside the handicap events, which, of course, meant nothing, there were twenty-four scratch contests in the Paris games, and the American athletes won eighteen.

The management of the games was very poor, the events being invariably far behind time; and on Sunday, Monday, and Thursday, July 15th, 16th, and 19th, respectively, they were not finished until after 7 p. m., although, according to the programme, they should have closed shortly after 5 p. m. In the management of games the French have much to learn.



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A. C. Kraenzlein Making a New Record for the 110-Meter World's Championship in 15 $\frac{3}{4}$ sec. over French Hurdles.

There was but one set of officials for both the track and field events, and as the field events had filled well, they took a long time, and thus delayed the meeting greatly.

On the second final day of the meeting, however, the committee took American advice, and had two sets of officials, but it was their first trial of the system and did not work satisfactorily.

The French officials were in some cases poor,

especially the starter, who would not be allowed to start school-boy sports in America. This was not so much their fault as that of the traditional French style of starting. In France the starter says, "*Préparez-vous*" (Prepare); then, three or four seconds later, "*Attention!*" and, in nine cases out of ten, he shoots the pistol immediately. In Germany they have the same system. There the starter says, "*Sind Sie fertig, meine Herren?*" (Are you ready, gentlemen?); a moment later, "*Achtung!*" and fires the gun. In both cases the runners generally start when they hear the first syllable of the word "*Attention!*" or "*Achtung!*" If the starter is not satisfied with the start, he shoots the pistol twice, and the men come back and get on the same marks, *i. e.*, there is no penalty for stealing. In general, they beat the pistol.

This was the system of starting used in the Paris preliminary heats, and came near to making a fiasco of the hurdle race. Fortunately, despite the poor starting, the men who were expected to win their heats did so. In the final, however, McLean, of Michigan, beat the gun from five to six yards. This made Kraenzlein, Pennsylvania, show his best form, which he did, catching the fast Michigander and beating him home in 15.25 sec. (world's record for grass), despite the heaviness and the upgrade of the course. As far as Kraenzlein was concerned, the start made no difference as to the result, but it was a great injustice to Maloney, of Chicago, who would have been second had a fair start been made.

As the finals of the other sprint races had only English and American competitors, Sanford, the old Yale athlete, was allowed to fire the gun, and good starts resulted. The French starter showed improvement all through the meeting, and on Thursday and Sunday the men were penalized for stealing, as in England and America. This had a very salutary effect, and the starts were much better thereafter.

The Racing Club grass track (500 meters) was in excellent condition, and, barring the stretch, which is somewhat slow for sprinting, it was fast; not up to our best cinder tracks, but remarkably fast for a grass track.

The Racing Club de France is situated in the middle of the Bois de Boulogne, a mile, at least, from any tramway and far from any railroad station. This inaccessibility affected the attendance greatly, which was very disappointing,

considering the caliber of the runners and the importance of the events. Those who were at the Olympic games in Athens remember the thousands upon thousands that crowded the Stadium and made the welkin ring with their generous applause. Compared to this, the French meeting made a sorry showing.

The action of the French management in holding games on Sunday has been much discussed. The cablegram received in America stating that the games would not be held on Sunday was not sanctioned by the French authorities, so they claimed, and it was regrettable the sender had not verified it, as it caused real injustice to be done to such teams as Princeton, Michigan, Chicago, and Syracuse, who would not have made the long journey had they known the real intention of the Frenchmen.

Pennsylvania had been accused of bad faith in the matter, but unjustly. Pennsylvania was the first to protest against Sunday games and the last to object; but when the French authorities stated absolutely that they would be held that day, then F. B. Ellis, manager of Pennsylvania, allowed the individual athletes to decide for themselves. Five competed and eight stayed out on principle (not because of faculty restriction).

In sprinting, the Americans were pre-eminent. In the English championships, Duffey, Georgetown; Jarvis, Princeton; Tewksbury, Pennsylvania, and Burroughs, Chicago, finished in that order, and in Paris the order would probably have been the same had not both Duffey and Burroughs broken down in the final heat. But Jarvis and Tewksbury finished within inches of each other, with Rowley, of Australia, a yard back.

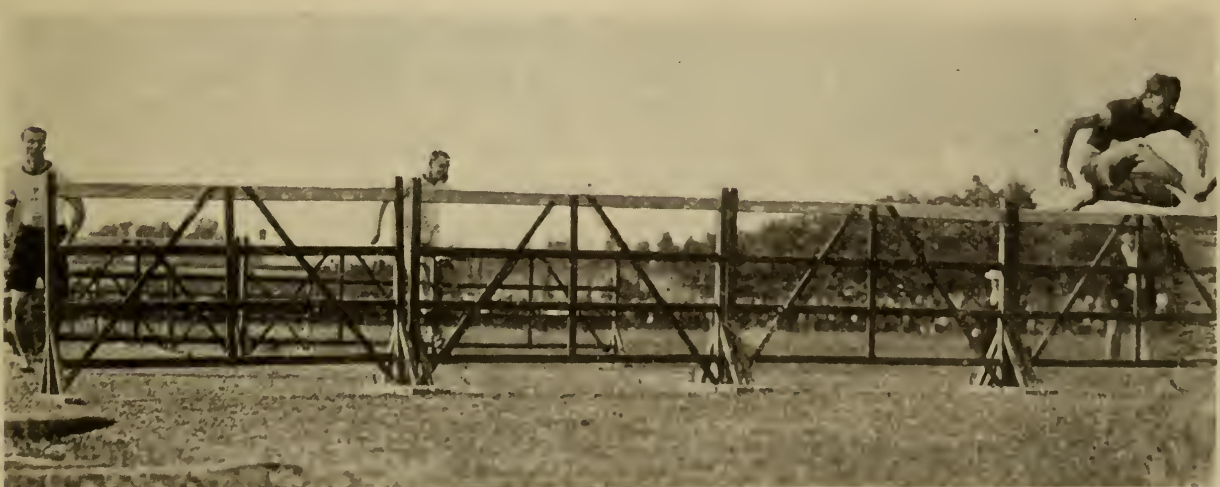
The superiority of the American sprinters is

due, not only to their better physical and nervous organism, but to their methods. They outclassed all the Continental runners in their style. The Europeans run, in general, awkwardly; not using the arms and shoulders to the best advantage. The legs and body do not work together as one piece of mechanism, as in the American sprinter. But even had the English, European, and Australian sprinters been able to run as fast, they would have been beaten because of their poor starting. Duffey, Jarvis, and Tewksbury opened the eyes even of the Englishmen through the quickness with which they left the mark and the celerity with which they got into their running. In England, the English champion, Wadsley, was beaten at twenty yards, simply run off his legs, by Tewksbury.

The superiority of style was again shown in the quarter-mile, which Long won, both in England and in France, doing 49.2-5 sec. in both instances. The Continental quarter-milers all lacked the speed necessary for such a short distance; apparently they tried to make it up by sheer strength, but it was impossible.

In the half-mile, Cregan's style and natural speed had to give way before the bulldog strength of the Englishman, Tysoe, who won both in England and in France. And yet I believe the standard of middle-distance running is slightly higher in America than in England. Cregan, Grant, Bray, Hall, Orton, Maxwell, Smith, Adams, have all done under 1 min. 58 sec., and several others have beaten 2 min.

The Continental half-milers ran at Paris in such poor form that though several showed promise, they were not at all dangerous. They run, in general, with the arms drawn up in a cramped position, impeding rather than aiding them. Their stride is unnatural and



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* Pritchard.

Trafford.

Kraenzlein.

The Last Hurdle in the English Championship Won by A. C. Kraenzlein.



Photo by Rentschler, Mich.

McLean, Michigan Univ.
Second in 110-Meter
Hurdle Race, Paris.

faulty; either they run on their heels, with too short a stride, or use too long a one. The Hungarian and Danish and German runners were examples of the latter.

That distance running is more a matter of strength than style or speed is proven by the English runners in general. In the four-mile English championship there was hardly an English runner of

perfect form. They were mostly plodders, running along with dogged determination, with arms too far up and faulty stride. But their great natural strength kept them going. Rimmer, who is the thinnest runner on the track to-day, runs along, scarcely lifting his feet, and, although he is about 5ft. 11in. tall, he strides very short. This style suits him to perfection, but it could not be taken as a model. Robinson, one of their very best men, has no form at all. He runs flat-footed and just plows along, using his arms the whole time. Of course, there are English distance runners who have a good style: Welsh, the retired



Photo by Rentschler, Mich.

Dvorak, Michigan Univ.
Pole-Vaulter at Paris.

Scotch champion, has a perfect form; Bennett, the present mile champion, has a good style. The fact that so many do well with poor style does not argue that they would not do better with an easier gait. The work of Bennett shows that, with an equal amount of strength, the better style will win in most cases.

The French distance runners have very good style. Deloge, who was

second to Bennett in the 1,500 meters, and Chastainé, who ran so well against Rimmer, the winner of the 4,000-meter race, both have a long, easy swing, which covers the ground very quickly and with little exertion. In the national race between England and France, England won; but, excepting Bennett, all the French runners had better styles than the English athletes.

The American distance runners proved a disappointment, mainly through lack of condition. They did not equal home form. A. Grant, who is one of our best men, ran unplaced in Paris, and did not show anything like his true form until the handicaps, when he gave Tysoe a hard race and then ran Rimmer from the same mark, being beaten out but by inches. Bray and Cregan were both somewhat



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I. K. Baxter Winning the English High-Jump Championship at 6ft. 2in.

off form, though the Princeton representative ran two very good races. Orton won the steeplechase, and thus scored America's only win in the distance events; but he won through sheer grit rather than condition, as he was not quite up to form.

On general results, however, we must grant England's superiority in distance running. It is the home of this special branch of track athletics, and there are undoubtedly more distance runners in England than in any other country. America has a select few who are just as good as the English, but the latter are much more numerous.

To speak of form in the hurdle race is somewhat unfair, as even in our own country all styles, good and bad, can be seen. In general,

the American hurdlers have the best form, so far as speed is concerned, as was proven in Paris, when Kraenzlein, of Pennsylvania; McLean, of Michigan, and Maloney, of Chicago, finished in that order in the high-hurdle event. Kraenzlein's form would be considered bad if we were to take as models such skilful performers as Stephen Chase, of America, and Shaw, of England. Considered from results, however, Kraenzlein's is the best form. The central idea of his style is to get over the hur-

petitors were more scientific. They had their take-off down to a fine point. Several Continental jumpers marked off their take-off distance, but had not practiced sufficiently, while others jumped, trusting only to their eye for marking the proper striding distance. In general, also, the Continental jumpers failed to rise sufficiently, and thus their jumps were curtailed.

The American jumpers were handicapped by what, under familiar conditions, favored fine performances. The last five or six yards of the runway were inclined, a height of about six inches being reached at the take-off board. This rise should add an extra foot, at least, to the jump, and, had Kraenzlein and Prinstein been familiar with it, they would undoubtedly have jumped further than ever. As it was, it handicapped them, and Kraenzlein's winning jump measured only 23ft. 5¾ins.

The high jump furnished a study in styles. The American and Irish jumpers cleared the bar either by running at it somewhat from the side or straight at

it, turning half when in the air and whipping one leg over after the other. This is the style of all Americans, and the most economical.

The Continental jumpers, with one or two exceptions, went at the bar and cleared it like a hurdle, or with their legs doubled up underneath them. In reality, they had to jump several inches higher than the Americans or Irishmen to clear the same height. Their style handicapped them, and it was not remarkable that they fell out by the time the bar was at 5ft. 6, 7, or 8ins. Baxter, of Pennsylvania, who won at 6ft. 2½ins., is the most economical jumper in the world. He has great natural spring, and, combined with this, makes a half turn in rising and throws his legs over sideways, thus saving every inch. He jumped wonderfully well in Paris, where he just failed to clear 6ft. 6ins.

Again, in the pole-vault, the majority of the Continental performers failed to get that easy swing across the bar and that pull with the arms which mean so much for the American vaulter.



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Tysoe, of England, Pushed to the Tape by Cregan, of Princeton, in the Finish of the 800-Meter Race at the Paris Games.

dle as quickly as possible. There is none of that perceptible glide exhibited by Chase and Shaw. Kraenzlein goes over the hurdle with a jerk, taking it almost in his stride. McLean and Maloney both approximate his style, and have evidently copied him, but have not yet learned the secret, since they are both rather awkward hurdlers. They both lack that scissor-like forward motion of the body which keeps Kraenzlein so close to the obstacle and maintains his speed.

The English, Indian, and Continental hurdlers are still running in the old style, more or less perfected. Pritchard, of India, is the best of them, and a fine hurdler. He would give Godfrey Shaw a close race. The English and Irish hurdlers have better form than any of the other Europeans excepting the French champion, Lecuyer.

The style of broad-jumpers is approximately the same the world over. At any meeting in America or England, good and bad styles are to be seen. So it was in Paris. In general, we may say that the English and American com-

Nearly every one of the European shot-putters would have been disqualified in England or America. In my opinion, they did not put the shot out straight from the shoulder, as our rules require, but really threw it. Under these circumstances it was surprising they did no better, 37ft. being their best. Sheldon, of the N. Y. A. C., gave a magnificent object lesson, for, putting the weight squarely, he made a new French record of 46ft. 2½ins.

The hammer-throw is not practiced in Europe, and there is thus no comparison of styles to be made, as there were none but Americans in this event at Paris. At the English championships, the Irish and Americans threw in exactly the same manner, except that the Americans took three turns instead of two. Englishmen wonder at their own poor performances, though still using the iron hammer and throwing with one turn! The latter is an eminently respectable method because of its age, Henry VIII. having been quite an adept in this style; but if Englishmen wish to come within measuring distance of Irish and American figures, they must revise their antiquated methods. Flanagan, the N. Y. A. C.'s member from Ireland, outclassed all competitors both at the English and Paris games.

The discus event furnished a surprise to America, as it was thought that Sheldon or McCracken would win, with some to spare. But this is a favorite sport in Hungary, where it is practiced assiduously, and many good men developed. Bauer and Janda were their best, and proved superior to all others. The Continental rules require the throw to be measured from the face line of the square in which the performer stands, or that prolonged perpendicularly to the point where the discus first touches the earth. This lost America the event, for Sheldon threw several over 120ft. outside the boundary.

Bauer deserves all credit for his victory, for, as with his fellow-countrymen, the discus left his hand and flew straight as an arrow without losing distance. In general, the control of the discus was remarkable in all the European contestants.

Bauer and Janda made a turn in throwing. Bersis, of Greece, threw in the style of the ancient Greeks. Several threw with a turn, but, as in the shot, stopped still at the front of the square, lost all their momentum, and they might just as well have thrown from a stand.

If the English proved their superiority in the distance track events, the French showed their superior stamina in the cross-country Marathon race. We are accustomed to consider the French

as a somewhat degenerate race, but the wonderful practice marches of their soldiers and their record in the professional and amateur Marathon races seem to disprove this notion. For three years the French professional champions, Charbonnel and Champion, defeated the best of the English in the Marathon race. This year Charbonnel finished close to Hurst, of England, though he had been injured by colliding with an automobile.

In the amateur Marathon, three Frenchmen finished in one, two, three order, then a Swiss, then three Americans, while the English, Ger-



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Kraenzlein's Form in Mid-Air—Winning the English Running Broad Jump Championship.

man, Danish, and Italian runners all gave it up. The race was run on the hottest day of the year, the course a very sunny and hard one; but the three Frenchmen finished comparatively fresh.

There is another factor in athletic competition which must be considered, viz., possession of that nervous force, grit, courage, or whatever it may be called, which so often wins races. The Continental athletes, especially the French, are lacking in this quality, whether for want of courage to struggle to the end, or through lack of that nervous force which allows an athlete to urge himself along though his muscles are weary and exhausted. For example, in the mile race, Deloge, of France, finished within four yards of Bennett, of England. Deloge walked away, while Bennett fell to the grass exhausted. Had the Frenchman the courage, or, if that was not wanting, had he the nervous power, he would have won the race. There is this excuse for the Continental athletes, viz., that they are accustomed to win or lose without that desperate final struggle which characterizes a race among English or

American athletes. Continental athletes will never prove successful against Anglo-Saxons until they develop this quality.

The Paris games should prove a great object lesson and an encouragement to Continental athletes. All the European countries were represented, and these saw the best athletes of the world in competition, and should benefit from noting their style.

In general, the Continental athletes learned much from the Americans as to training. With a better system of training and better models of style, great development should be made throughout Europe the next ten years.

For the present, America is far in the lead, and her athletes should have no difficulty in holding that pre-eminence for many years to come.

GEORGE W. ORTON.

ROWING.

THE NATIONAL CHAMPIONSHIPS.

FOR the first time in twenty-eight years of life, the National Association of Amateur Oarsmen held its annual regatta, July 19th, 20th, and 21st, on the Harlem River, New York, over what has come to be called the Speedway Course.

This is a stretch of water alongside the recently constructed driveway on the upper Harlem River, north of Central Bridge (155th Street), and was made possible and practicable by the canal cut by the Government to connect the Hudson and the Harlem rivers.

This canal not only admitted a volume of water sufficient to scour out the upper Harlem and make it an ideal race-course, but, what is equally important in aquatic contests, gave the Government the right to control the river traffic.



Exley.

De Baecke.

The Vesper Club Champion Pair-Oar.

TO the spectator the Speedway gives opportunities unequaled elsewhere in the country, for it provides a natural shelving amphitheater upon which thousands, tier on tier, can have an unimpeded and free view of the course from end to end.

Incidentally, this had the effect of reducing the profit which the Association expected from the sale of seats upon the platforms they had, somewhat unnecessarily, erected. Few needed to pay where nature had been so bountiful in its provision, and the gate was correspondingly lessened; an event OUTING by no means regrets, on the general principle that the less the gate enters into the consideration of sportsmen, the better are the conditions of the game likely to be.

THE regulation course was one mile and a half, straightaway, beginning at the north, opposite Fordham Heights landing, and ending about a hundred yards south of Washington Bridge.

The course for the trials to select crews for the Paris Exposition regatta was one mile and two hundred and fifty-three yards, ending at the same point as the regulation course, but beginning farther south, opposite University Heights.

The weather conditions were nearly uniform, clear and warm, with brisk winds.

THE management was efficient, the course being kept clear by revenue cutters, whilst by means of telephone communication and ball signals, set clear and high, the spectators awaiting the finish were apprised, almost from minute to minute, of the relative positions of each crew as they passed certain given points.

Only one incident marred the harmony of the regatta. In the Paris singles the contest lay virtually between Ten Eyck and Rumohr, whose positions in the draw were next to each other, Rumohr to the westward. The wind

was blowing strong from the southeast, and each boat was perceptibly blown westward of its true course. At the half-mile, Ten Eyck's boat was directly in front of Rumohr's, whereupon the latter stopped rowing, claiming that Ten Eyck had purposely taken his water, and, in doing so, fouled him. Rumohr finished the course in 6m. 24½s., to Ten Eyck's 6m. 13½s.

The testimony of eye-witnesses as to the boats actually touching was conflicting, but the referee's decision was in favor of Ten Eyck, probably for the reason that each of the contestants had been told that the race was, under any circumstances, to be rowed through, and not to be won or lost on technicalities.

BE this as it may, the feeling aroused by this incident would have been allayed if, next day, in the championship single sculls, Ten Eyck, who won that honor in 1899, and was entered for it again in this regatta, had met Rumohr and settled the question of supremacy by a contest; but Ten Eyck did not appear to uphold his championship, leaving Rumohr the inglorious victory of a row-over. It was unfortunate, to say the least of it.

The popularity of rowing was never better exemplified than by the presence of the enthusiastic thousands who gathered each day on the borders of the course.

The clubs represented in the contests were:

The Dauntless, Union, Bohemian, Knickerbocker A. C., Nassau, Harlem, Nonpareil, and Atalanta, of New York; the Laureate, of Troy, N. Y.; the Fairmount,

Vesper, Pennsylvania Barge, Crescent, Bachelors' Barge, and Malta, of Philadelphia, Pa.; the Detroit, of Detroit, Mich.; the Wachusetts, of Worcester, Mass.; the Bradford, of Cambridge, Mass.; the Jeffries Point Rowing Association, of East Boston, Mass.; the Millstream, of Chelsea, Mass.; the Springfield, of Springfield, Mass.; the Young Men's Gymnastic Club, of New Orleans, La.; the Institute, of Newark, N. J.; the Potomac, of Washington, D. C., and the Don Rowing Club, of Toronto, Canada.

The contests resulted as follows:

SENIOR EVENTS.

Championship Single Sculls—J. A. Rumohr, Harlem R. C., row-over by default.

Association Single Sculls—Frank B. Greer, Jeffries Point R. A., East Boston, 8m. 17s.

Pair-Oared Shells—Vesper B. C., Philadelphia, 9m. 33½s.

Double Sculls—Wachusetts B. C., Worcester, no other entry.

Four-Oared Shells—Detroit B. C., 9m. 18s.

International Four-Oared Shells—Wachusetts B. C., Worcester, 7m. 36¾s.

Eight-Oared Shells—Vesper B. C., 9m. 1¼s.

INTERMEDIATE EVENTS.

Single Sculls—F. Demourelli, Young Men's Gymnastic Club, New Orleans, 9m. 33¼s.

Double Sculls—Crescent B. C., Philadelphia, 9m. 1¼s.

Four-Oared Shells—Nassau B. C., New York, 9m. 14½s.

Eight-Oared Shells—Dauntless B. C., New York, 10m. 2s.

PARIS EVENTS.

Single Sculls—E. H. Ten Eyck, Wachusetts B. C., Worcester, 6m. 13½s.

Double Sculls—Wachusetts B. C., no other entry.

Four-Oared Shells—Vesper B. C., Philadelphia, 5m. 14s.

Eight-Oared Shells—Vesper B. C., 6m. 5½s.



Photo by T. C. Turner.

The Harlem River Speedway Rowing Course.

YACHTING.

SPARS TOO LIGHT ON RACING YACHTS.

SITTING in a quiet corner in New London, the other day, with Harry Haff, the sailing-master of the fleet little schooner *Quissetta*, I discussed the season's work in the schooner class up to the time of the conversation. The seaman admitted that the defeats of his vessel by the smart yacht of W. Gould Brokaw had been hard to accept, but he confessed that the improvements in the Cary Smith schooner had made her much better than she was last season. On the other hand, *Quissetta* has not been in her best form, and when I saw Capt. Haff, he was preparing to take her out of the water for a thorough overhauling.

But it was not of the comparative merits or conditions of these two sweet little schooners that I started out to write. We naturally fell to talking about the last series of races for the *America's* Cup, and I learned from Capt. Haff that he was on board of *Shamrock* on the day when she carried away her topmast.

I ventured to express the opinion that the vessel was somewhat lightly rigged, for I recalled that she had been strung all over with light gin blocks to save weight, and that some of her wiring looked to me to be flimsy. But Capt. Haff, an experienced and competent professional sailor, whose judgment is much better than mine, said that the yacht's rig was plenty strong enough. The cause of the carrying away of the topmast was an undiscernible flaw in the weather shroud. It parted as cleanly as if it had been cut with an axe. A thing like this cannot be foreseen. It was one of the fortunes of war, and it cost *Shamrock* the only chance she had to show what she could do with *Columbia* in a reaching breeze.

Then I asked Capt. Haff what he thought of *Shamrock's* model. He declared that it was all right. He held that it was not the lines of the vessel which defeated her, but her light sparring. Her spars, he said, were not strong enough to hold her canvas. By this he meant that the gaff and boom were not substantial enough to keep the mainsail flat, and that the sail bellied too much. This, he held, was the main cause of her defeat on the wind, in the stiff breeze of the last race.

PERSONALLY I do not think that this will account for the whole of *Shamrock's* failure, and

as I predicted her defeat on her lines as soon as I saw her in the dock at the Erie Basin, and put my prediction into print at that time, I naturally do not care now to admit that there was some other cause for the beating. But this must be said. All the difference between her lines and those of *Columbia* would not account for the enormous disparity in their powers of holding on the wind in that last race. *Defender* would have beaten *Shamrock* on that day, and every expert who examined the model of the Irish cutter said it was an improved *Defender*. Therefore, I am inclined to believe that Harry Haff's theory as to the incapacity of *Shamrock's* spars is correct.

On such a day, in a thrash to windward, the defect would make itself most seriously felt. Held on the wind in a stiff breeze the spars would buckle, and let the mainsail sag to leeward in such a manner that the yacht could not be made to point nearly as high as she would in a light breeze. It was in the drifting airs of the first two attempts to sail the races that she held her own with *Columbia*. As soon as it blew a racing breeze the American yacht wind-ed her; and when it blew freshly, *Columbia* made a show of her on the wind. These facts argue in favor of Capt. Haff's view of the chief defect in *Shamrock*. My own observation of the two in ordinary racing weather convinced me that there was less outwinding than out-footing. *Columbia* had the heels of her rival on the wind, and it was only in the last race that the American yacht palpably outpointed her opponent.

The fact that she did so when it blew is in favor of Haff's proposition, and I am inclined to think that this is a matter to which the owners of racing craft should give very serious attention. To be sure, no man wishes to carry an ounce more aloft than he is absolutely compelled to have there. But the question is whether it would not be better to carry just a trifle more than is necessary in light breezes in order not to be beaten by sagging canvas when it blows.

I HEARD some unfavorable criticisms on the cut of Ratsey's sails on *Shamrock*, but was not able to see the ground for them except in the case of the jib, which was a wretched piece of work. In my humble opinion, the mainsail of *Shamrock* and her No. 2 club topsail were works of art. But in the matter of headsails the American yacht was a little better off. If,

however, the gaff and boom of *Shamrock* were not good enough for her mainsail, all the smartness that Ratsey undoubtedly possesses could not have enabled him to make a mainsail set perfectly.

If the spars are too heavy, the sail will be pulled all out of shape. There is no doubt about that. But if they are too light, the sail will also be pulled out of shape, only this time the power will be applied directly by the wind.

Ever since the English were amazed by the flat, board-like set of *America's* sails, we have shown them the way in all matters of this kind. We even taught them how to set canvas for running and reaching, though it must be confessed that we had a hard job to convince them that our way was better than theirs. And now we must take care not to fall into the error of putting spars on our yachts too light to hold the canvas. We have not done it in the case of any cup defender, but it is altogether likely that it is the cause of the defeats of some other vessels. Yacht owners should look to this thing.

W. J. HENDERSON.

IN NEW ENGLAND WATERS.

ASIDE from the sport they furnished, the races for the Quincy Yacht Club's silver cup for 21-footers were of value for the lesson they taught yachtsmen of the foolishness of extremely light construction in hull and spars. There was not a boat of the four contesting that did not suffer an accident to spars or rigging, while *Tashmoo*, by going practically to pieces after the second race, spoiled all chance of satisfactorily proving the merits of some of the original and promising features of her design.

The actuating motive was in almost every case the desire to save weight, resulting in a failure to give adequate strength to parts subjected to severe strains.

An inch more of wood in the spar at the head would have saved *Pompano's* mast in the first race, and possibly have won her the race, for she was the leading boat when she broke down.

A mast a couple of inches greater in diameter would have kept *Tashmoo* in the game a little longer, while a little extra strength in fittings would have prevented the accidents to the gaffs of *Hostess* and *Lookout*.

A little greater thickness of framing and planking, together with better interior bracing, would have kept *Lookout* from twisting out of shape and humping her sides when the strain of the rigging came, as if she were a camel, instead of a boat, while the same attention to

construction would have held *Tashmoo* together to complete the races.

THAT the win of *Lookout*, the challenger from the Manchester Club, was secured on its merits, or that the boat herself was the fastest thing of her length in the "scow" type, no one has questioned, yet she would have been faster if properly constructed and rigged.

There is nothing to prevent the challengers and defenders from agreeing for next year on a scheme for strong construction and rig that will give satisfaction to all concerned. The type is a fast racing one, and is interesting because of the great speed it develops. It should be encouraged for those reasons, but no good argument can be presented why the competitors should feel obliged to go each other "one bet-



Photo by N. L. Stebbins.

Lookout, Manchester Y. C., Winner of the Quincy Cup.

ter" in light construction in the hope of a win from some lucky strike in this direction.

THAT there will be challenges and races next year is certain, and they will give the Manchester Club a fresh impetus toward the high place in yachting for which it is already well under way. Messrs. Higginson and Boardman, owners of *Lookout*, will not be content to trust the defense of the cup to a last year's boat, as did the Quincy Club this year, but will have a new one, and another try at the Crowhurst cup, the valuable Manchester Yacht Club trophy that is offered yearly, and which for 1900 is safely in their possession because of *Lookout's* handsome win over the 25-footers as well as boats of her own length.

Interesting as were the races for the Quincy cup, they have been matched by open and club

aces in various places and in the popular H. O. and Y. R. A. classes of cabin 25-footers, as well as in the 21-foot race-about and knock-about at Marblehead.

It has been nearly as difficult to pick a winner in the height of the season as in the beginning, and the prospect is that the season will come, in September, to the successful close which was predicted from its successful opening in June.

W. E. ROBINSON.

THE APPRENTICESHIP OF THE 70-FOOTERS.

THE spirit of the age demands the very fastest speed possible out of horse and man, locomotive, motor, and cycle. It would be idle to suppose that a racing yacht should be an exception. Therefore heavy scantling and the stout rigging and iron work which obtained twenty years ago have vanished, for the simple reason that they are detrimental to velocity. In their place we find the spidery system of construction which is exemplified in its highest development in *Mineola*, *Yankee*, *Rainbow*, and *Virginia*.

The contests of these seventies so far have been interesting from every point of view,—from that of the wondering spectator, who knows nothing about yachts, to that of the curious naval architect who stands amazed at the daring of their designer, and of the veteran seadog who marvels how long it will be “before the pesky contraptions pound themselves to pieces.” The racing especially proved that they are nothing but scientific racing machines, with not a particle of cruiser in them.

A gratifying feature of the struggle has been the highly creditable handling of *Yankee*, by Herman B. Duryea, and of *Virginia*, by W. K. Vanderbilt, Jr. It is true that Mr. Vanderbilt has had the advantage of the advice of Mr. J. Fred. Tams, one of the smartest amateurs we have, but the pupil bids fair soon to be as able as the tutor. The British skippers aboard the rival craft have had to keep their eyes skinned all the time.

It seems pretty well established that there is little to choose among the four craft, and that Mr. Herreshoff has dealt conscientiously with each of his clients. Next season will be the crucial test of the 70-footers, if the fears of the veteran seadog mentioned above are not realized, and the yachts happen to hold together until then.

When they attain their true form, I believe they will be as closely matched as the famous 30-foot class, one of which, *Vaquero*, beat *Hera* by only one second the other day, while on an-

other occasion *Wawa* won by eight seconds, and four of them crossed the finish line inside of thirty-two seconds. Those yachtsmen who do not believe that a one-design class can furnish true sport might do worse than ponder over such little matters as these, which, by the bye, are quite common. The one-design classes have been as beneficial to the sport as the one-gun start, but the old-timers are loath to believe it.

THE FUTURE OF CLUB CRUISING.

THE Atlantic Yacht Club's annual cruise has always been one of its most cherished institutions, but as years roll on it has become evident that there is only one cruise that appeals to the larger clubs, and that is the August cruise of the New York Yacht Club. The Larchmont Yacht Club recognized this long ago, and in the place of its cruise, which was generally pleasant, but never at all brilliant, it substituted the Larchmont Week, and that was an undoubted success from its inception.

The Atlantic's usual cruise began with a rendezvous at Riverside, Conn., thence to Morris Cove, to Greenport, and to New London, where they disbanded. The squadron consisted of four schooners and fourteen single-stickers. Among them was the imported cutter *Astrild*, which sailed so fast that she came near beating the big schooner *Atlantic*, which led the fleet.

Yachtsmen who took part in the cruise, while acknowledging that the time had passed most pleasantly, and that harmony reigned all round, when approached confidentially, admitted that it had not been particularly exciting. In fact, the general feeling prevailed that a leaf should be taken from the Larchmont book, and an “Atlantic Week” established, where races could be sailed off the beautiful quarters at Sea Gate, and, in a word, seven days of sport and social enjoyment be passed. I will not go so far as to say that there will be no cruise next year, for the younger members of the club are by no means willing to interfere with or try to upset the ancient traditions of an organization they take so much pride in, and which, since its removal to Sea Gate, has taken huge onward strides; but I am certain that what the progressive element wants is an “Atlantic Week,” and in time it will get what it wants.

THE N. Y. Y. C.'S PROGRAMME.

THE tendency of the New York Yacht Club is toward abandoning the annual cruise and substituting in its stead a function both sporting and social, formed after the famous Cowes Week in England. Newport will, of course, be its headquarters, and the special series at New-

port preceding the annual cruise this year may be looked upon as the entering wedge.

The racing season of the club will in the not far distant future begin with the annual regatta over the New York course. This will be followed by a regatta, or a series of regattas, on Long Island Sound, off the station at Glen Cove. Then will come the great reunion at Newport, and the season will wind up with an autumn-regatta outside Sandy Hook Lightship. That this will be the ultimate destiny of the club, there is no doubt. Things have been working that way for years. Of this, I am assured on high authority.

LARCHMONT MANAGEMENT.

THERE is one thing to be said about the Larchmont Week, and that is, to praise its able management. A well-conducted club which caters to sportsmen, and offers the same encouragement to go-footers as it does to midgets, must necessarily appeal to all yachtsmen. A regatta committee that does its work in a workmanlike way, that is quick at decisions, and never makes a second decision, is what a yachtsman appreciates; and, in addition, a regatta committee that boldly goes out at high noon and

announces its intention of starting the race in a fresh breeze, while the existing conditions are those of a flat calm—yes, and actually succeeds in finding the wind and making the start—cannot get too high encouragement.

The daily papers have told of the glorious success of the "Week," and I am forbidden to enter into details; but perhaps I may be allowed to hint that when the elements were unpropitious for sport afloat, there was always to be found a superabundance of sport ashore.

NOTES.

Two new boats have excited admiration this season, especially among the Larchmonters—Mr.

Cord Meyer's *Altair* and Mr. Oswald Sander-son's *Countess*. Both were built at Bristol, R. I.; and when you look at them, you feel it in your bones that they are born flyers.

Admirers of *Altair* say that she has already achieved the purpose for which she was built, and that *Syce* is outclassed. This, of course, is premature, but much allowance must be made for the enthusiasm and prejudice of yachting cranks. This much is true, the advent of *Altair* has added renewed attention to a class whose exploits have always been noteworthy from a racing point of view.

The explosion aboard the naphtha launch *Sasco* off Echo Bay, New Rochelle, and the lamentable consequences, emphasize the need of proper care in the handling of craft propelled

by any kind of power — gas, steam, electricity, or sails. A gun affords delight to the sportsman, but in the hands of the "didn't-know-it-was-loaded" individual it has caused many disasters. The capsizing of the yacht *Mohawk* ever so long ago, or of the *Idler* on Lake Erie only the other day, calls attention to the ease with which recklessness may cause loss of life.



Yankee Under Full Sail.

The owners of power launches other than steam may, however, take comfort by the fact that the percentage of accidents in the craft they own has been surprisingly low since the gas engine was applied to the propulsion of boats. A leaky oil-tank is as dangerous as an overloaded gun, as a steam boiler with safety-valve weighted beyond its limit, as a sailing yacht with sheets and halyards securely made fast when all flying kites are spread and a terrific squall is about to burst. Unceasing vigilance is always necessary, lest the holiday jaunt become a tragedy.

A. J. KENEALY.

ANGLING.

AUTUMN FISHING FOR STRIPED BASS.

STRIPED bass are found in the Eastern estuaries, coming in on the flood and feeding on the broken meadows that have been partially washed away by storms, or getting their food among the rocks lying on the bottom of the bays. Their partiality to waters of this latter character has given them the name of "rock-fish" in Maryland and farther south.

Striped-bass fishing has been followed as a high art for more than half a century along the Atlantic coast, enlisting the keenest interest of eminent business men of New York and New England.

The localities most frequented are the rocky shores of the coast from Block Island north to the Bay of Fundy.

The tackle used is a two-jointed rod about eight feet long, a multiplying reel, and 600 feet of twelve-strand line, with menhaden as bait, which is cast outward just beyond the breakers.

THE West coast anglers have added to their already abundant list of salt-water fishes the striped bass. This fish, like many others when transplanted, acquires a more vigorous growth, particularly in the lower Sacramento River.

It would be well for California anglers to follow the lines laid down by Eastern experts when trolling for this fish, to wit: Use a No. 3 Skinner spoon or any other of similar size; remove the lower gang of hooks and substitute a snelled 1 O or 2 O single sproat hook, the snell being about three inches long. Upon this hook place sand worms, or worms of any kind, hooking them about an inch below the heads, with their tails trailing behind as the boat is rowed slowly over their feeding grounds.

Salmon are taken in the month of September on a trolling spoon, and below the falls of the Willamette River, in Oregon, an occasional salmon is lured by casting the fly. In upper Puget Sound many of these fish are taken by trolling with a crude device which the guides manufacture out of tin. It is of large size and of nondescript appearance, but is very effective, particularly for the silver salmon, the species which takes a lure most readily in Pacific waters. Deep-water fishing off the Pacific coast is much indulged in.

THE salt-water fisherman should always take with him a small stock of bright flies tied on

1 O to 3 O hooks, and whenever an off-shore breeze is blowing, and there is clear water near the beach, he will have good sport by casting his feathers outward from thirty to fifty feet. W. C. Prime always caught the spotted sea trout on a large, bright fly, and I have known seventeen different species of salt-water fish to be taken with similar lures in a morning's fishing in Florida waters.

Salt-water fishing with rod and line reaches perfection on the sea-coast and in the estuaries north of Key West, Fla., in the month of September. In the more southern waters, notably in the St. John's River, Florida, the tarpon are of great size and strength, and the winter angler for the "Silver King" on the Gulf coast would be astounded at the increased number of these fish, and their acrobatic agility during the summer months.

All along the coast, from Florida as far north as the Delaware Bay, the barb, spotted sea trout, croaker, "Taylor" (a Southern local name for small bluefish), sheepshead, and many other fishes literally swarm, and are taken with shrimp, clam, or fiddler baits.

SPORT WITH BLACK BASS.

BLACK bass now afford capital sport upon many waters. Trolling, fly-fishing, and still-fishing are the methods followed. Trolling outfits may be procured at any tackle shop, also all necessities for still-fishing, except the baits. The fly-rod and incidentals must be procured from some well-known dealer, for the very best is none too good for the sturdy, hard-fighting, high-leaping bass. Among reliable flies are the hackles, Silver Doctor, Seth Green, White Miller, Coachman, Chubb, Lord Baltimore, Parmachенnee Belle, and Furgerson.

LURES FOR AUTUMN TROUT.

WHILE trout fishing is not now so good as it was earlier in the season, cunning hands may yet take their share. During the heated term the best places are where cold springs run into larger streams, or where they bubble up from the bottom of pond or lake. Big fish gather wherever they can find the coolest water. Bait is most to be depended upon, but flies are sometimes reliable, especially at dawn and late evening. Useful flies include Coachman, Royal Coachman, Shad, Orange Fly, Camlet, and Dusty Miller. For bait, white grubs found in decayed logs, worms, grasshoppers, and fat pork are excellent.

W. C. HARRIS.

THE SPORTING DOG.

CONDITIONING AND WORKING DOGS FOR EARLY SHOOTING.

THOSE who own kennels either understand how to prepare dogs for the regular shooting season, or they have a paid handler who attends to all such matters. But the ordinary young sportsman, who possesses but one dog, seldom has it in proper working condition until the season is at least half over. To the one-dog man I would say:

Don't take a hog-fat, soft dog into the field and expect him to do anything—especially in warm weather. Don't flog him for apparently shirking work or making mistakes, when, thanks to your neglect, he is in no condition to do himself justice. Give him daily runs, lengthening every day, for a couple of weeks before the season opens. An occasional long swim behind a boat is also good. Run him hard toward the end, on good food. Don't flog him at all, unless you are certain that you are right and he is wrong—and that he knows he is wrong.

There is no sense in beating a dog when he does not understand what you want him to do. First make sure that he understands, and is merely obstinate, or wilfully disobedient. Then give him a sound thrashing with a proper dog-whip. Never kick a dog, or throw a stone at him, or take a club to him. These things are bound to bruise, and sore muscles cannot do good work.

Never work a dog with a collar on him. By this I mean a broken dog, for, of course, some device of training collar may properly be worn during preparatory work. Those who run a dog hard through cover appear to forget that a collar is an exasperation and frequently a grave danger. Think of trying to force your way through a tangle of stuff while wearing some fool-strap or chain so placed on you that it is bound to catch half the twigs that may rake you. A collar on a working dog catches in things, and, worst of all, may hang him outright if it fouls anything while he is getting over a fence or working on top of a brush heap. Remember that a dog hung by his collar cannot very well give tongue or signal his predicament, and a dog so hung up may become a dead dog while you are blowing a whistle or striving to locate him upon some point. Don't imagine that the dog does not understand all about the collar. You take it off him just before starting him ranging, and notice the glad, free movement and dash he will show.

THE nearest approach to a collar which wise men allow their dogs to wear in the field is a weak string, so weak that it will neither hang nor hold the dog. To this is attached a small bell—one from a string of old sleigh-bells will answer first-rate. This is an excellent device for work on cock in tall corn. The green stuff will not break the cord, so the dog is not liable to lose his bell unless at a fence. No matter how dense the corn may grow, the tinkle of the little bell will tell where the dog is. When the sound ceases, the dog is pretty sure to be on a point, and he may be looked for near where the bell was last heard. If he should lose the bell, it is only a trifling matter.

A dog, rationally treated, should do first-class work at the opening of the season and be able to stand several hours of it without distress. Don't run him too long without water. Allow him to get into the water up to his ears if he wants to. A dog sweats through his mouth, but a reasonable soaking in cool water is as refreshing and as beneficial to him as it is to an overheated man.

Don't work a dog for hours in marshy ground and then make him run for miles on a hard road. Too much work in the wet will so soften his feet that hard going will wear the skin and lame him. Damage done in this way may require days of the best of the season for repairs.

Don't fancy a dog is made of steel; carry him in the trap when going out and returning—it is better to have him a bit too full of energy than leg-weary before the day is done.

Don't carry food for a dog out for one day. Feed him all he will eat the evening before, give a biscuit or a bit of bread before starting, and a trifle from your own lunch at midday—but nothing like a meal. Give him all the water he wants.

Don't fail to examine his feet, and, if he be a setter, to take every burr off him before feeding. Then give him all he will eat, leave fresh water within his reach, and the chances are he will sleep the night through and be fresh as paint in the morning.

If you are out for a few days and must sleep in strange quarters, let your dog, if possible, sleep on the floor of your room. He will be perfectly content there and will get his needed rest. If chained in a strange place, he may fret half the night; he may get away and be lost, or he may be stolen. Thieves steal dogs when shooting is good!

E. W. SANDYS.

THE AUTOMOBILE.



THE PLEASURE OF DRIVING IT.

NO one who has not become a complete master of the art of driving a self-propelled vehicle has the faintest conception of how really fascinating it is. To become such a master you must, in the first place, be a good mechanic; and then, according to the attention you devote to your machine, will the results be, assuming always that the vehicle is well made. Traveling at a great speed creates a cool and refreshing wind even on a calm and sultry day, and produces an exhilarating effect on those who experience it. It is man's nearest approach to flying; and as man cannot fly, by the rule of contrary, so is he anxious to do so. Maybe the swift-flying bird would give his wings, almost, to be able to walk on earth at four miles an hour.

THE TREND OF TRADE.

THE making of motor vehicles will in America follow different and broader lines than those it has pursued abroad, by reason of the radical difference between foreign and American ideas and the wider diffusion of money among the masses here. The foreign maker caters to the aristocrat; he prefers to turn out few vehicles, and those only expensive ones. The American maker believes there are more people who have \$300 to spend for a luxury than there are who have \$3,000 for the same purpose. This means that here we will see machines turned out by thousands, where abroad they have been slowly produced by scores.

THE LIKELY MOTOR CYCLE.

SOME pretend they can see that the American will take to the new sport by equipping his present form of bicycle with some sort of a

light motor, thereby making it what the yachtsman would call an auxiliary. Such a vehicle is a hybrid, and to the sportsman thoroughbreds alone appeal. The motor bicycle, while being very much heavier than the unmotored, would have none of the stability that is developed by the addition of one or two wheels more. The two-wheeler would afford no possibilities for companionship, for luggage-carrying, or for touring, while its inclination to side-slip, by reason of its added weight being largely above the center of gravity, would make this motor bicycle a dangerous machine to manipulate. The motor tricycle or quadricycle avoids all of this, and thereby appeals at once to large and influential classes of purchasers.

To the energetic, record-seeking, century-riding wheelman, the motor bicycle will not appeal, because it does not afford him either exercise or excitement enough; his less energetic brother of the pedal, the so-called tourist, will have none of it, because it will not go the gait its three- or four-wheeled brothers will. For this and other equally good reasons, the motor bicycle is, in its chances for success, far outstripped by the tricycle or quadricycle; and it is along these lines that in America the greatest improvements will be brought about, and the greatest commercial fortunes made, during the next decade.

RELATIVE POSITIONS OF TYPES.

WHERE increased cost and extra heavy weight do not act as barriers, the limited range of electrically driven vehicles finds compensation in the cleanliness and self-sufficiency of the propelling force within the strength of the batteries employed. There is satisfaction and fascination in driving a vehicle with a reserve power independent of frequent fueling. Well-calculated use in city and suburbs will not exhaust the proven capacities of electricity, and recharging stations are always within a reasonable radius. For these and collateral reasons, the storage-battery type is safe in its present favor with residents of large towns. Weights, as a rule, exceed 1,500 pounds; prices are \$1,500 and upwards.

A determined effort is being made to add to the range of the electric automobile, and to cut down the time required for recharging.

There is an agreeable tendency on the part of makers to build the driving and controlling mechanism, so far as possible, out of sight.

ROBERT BRUCE.

NOTABLE PERFORMANCES AND RECORDS.

Conducted by Charles Edward Patterson.

THE defeat of the Harvard-Yale team in 1899 has been far more than atoned for in the great sweep of the thirty-five American collegiate and club athletes at London and Paris in July, 1900. This time the men were truly representative of amateur athletic ability in the United States; last year they were not. The teams this year included men from all parts of the Union. These men could have pinned upon their breasts fourteen out of fifteen national championship emblems for 1899, and ten out of thirteen intercollegiate championship medals for 1900. There were six colleges represented by twenty-eight men, besides athletic-club members from the New England and Middle Atlantic States. Of the seven club members, all but two were collegians.

AT Paris, in the games connected with the Exposition, the Americans contested in twenty-four scratch events, twelve of which were of the world's championship class. One of these was the tug of war, in which the Americans picked up a scrub team and went into the competition as a lark.

Of the twenty-four events, Americans won eighteen, England four (800- and 1,500-meter flat races, 5,000-meter team race, and 4,000-meter steeplechase), Hungary one (discus), and France one ("Marathon" race). America also captured thirteen second places and twelve thirds. England's team could have been strengthened, no doubt, but the drubbing received in the British championships acted as a deterrent. A complete statistical table of the outcome of the games appears on the next page.

OF the twelve championship events, all but three went to America, and, comparing the records of Tysoe, the English champion at the middle-distance runs, with those of Cregan, it is not too much to assume that at least one more would have come our way had the latter been anything better than downright ill. As it was, he got out of a sick-bed to perform, and Tysoe could not beat him a full yard in ordinary time. Orton and Grant, too, were, from climatic influences, much below their normal form. The enervating atmosphere is a much more serious matter to those who have to stay up for the distance runs than for short bursts of speed or the field events.

Our three crack sprinters had it out again, but this time Duffey met the fate which has so often overtaken Jarvis, and strained his leg

while leading in the final at 50 meters. He got his usual lightning start and could doubtless have held his lead for 100 yards, but it would not have been surprising to have seen both Jarvis and Tewksbury pass him in the remaining nine yards. Duffey's limit for real championship work is 100 yards, whereas both Jarvis and Tewksbury only begin to score as they approach that mark. Duffey should hold all world's records up to 100 yards, but from that point I should regard Jarvis as the better man. The latter's world's record for 100 meters may be adduced as evidence in favor of this hypothesis.

In crediting Baxter with the pole vault, and Long with the 400-meter race (even though the latter was run in world's record time), it should be remembered that Johnson, Coleman, and Horton all sacrificed the practical certainty of beating Baxter to their convictions as to Sunday competitions and their steadfastness to the general agreement not to compete on that day; also, that Boardman, of Yale and the New York A. C., victor over Long in the "Mott Haven" games, lost his chance for the same reasons. Prinstein also stood out on Sunday, while Kraenzlein, with six more jumps, cut down his lead in the Saturday preliminaries and won the broad jump by a narrow margin.

Sheldon's proverbial hard luck with the discus pursued him, as his long throws hit trees or other objects. He has beaten Henne-
man's (Chicago A. C.) world's record of 118ft. 9ins. repeatedly in practice and twice in competition. In both of the latter cases, however, technicalities deprived him of the record. His opponents, Bauer and Janda, were certainly worthy foemen, as the former's record of 118ft. 2 9-10ins. attests. Flanagan is usually sure of one big throw in a contest, and his 167ft. 4ins. was only 4ins. less than his world's record; but, as he is still a subject of the Queen, we are not buying any greenhouses on his account.

SOME British critics take exception to our victories on the ground that we take the matter too seriously and lay too great stress on the importance of winning. Perhaps some individual competitors do, but the writer's strong impression is that American athletes as a body are the best on the planet because they add to natural vigor and high animal spirits the praiseworthy determination to do thoroughly and well whatever they undertake to do at all.

Record of American Athletes in the Paris Exposition Games, July 14-22, 1900.

EVENTS.	PLACED MEN.			PERFORMANCES OF PLACED MEN; AND OTHER EXPLANATORY NOTES.
	WINNER.	SECOND.	THIRD.	
WORLD'S CHAMPIONSHIPS.				
100-meter run (109.36 yds.).....	Jarvis, Princeton.....	Tewksbury, ex-Penn.....	Rowley, Australia.....	10 4-5 sec.; world's record; Tewksbury also made this time in semi-final.
400-meter run (437.44 yds.).....	Long, N. Y. A. C.....	Holland, Georgetown...	Schultz, Denmark.....	49 2-5 sec.; world's record; won easily.
800-meter run (874.89 yds.).....	Tysoe, England.....	Cregan, Princeton.....	Hall, Brown Univ.....	2 min. 1 2-5 sec.; won by two feet.
1,500-meter run (1,640.41 yds.).....	Bennett, England.....	De Loge, France.....	Bray, N. Y. A. C.....	4 min. 6 sec.; world's record.
2,500-meter steeplechase (1½ miles, 94.03 yds.).....	Orton, ex-Penn.....	Robinson, England.....	Newton, N. Y. A. C.....	7 min. 34 sec.; world's record.
110-meter hurdle race (120.30 yds.)	Kraenzlein, Penn.....	McLean, Univ. Michigan	W. A. Maloney, Univ. Chicago.	15 2-5 sec.; world's record for distance and conditions.
400-meter hurdle race (437.44 yds.)	Tewksbury, ex-Penn.....	Tauzin, France.....	Orton, ex-Penn.....	57 3-5 sec.; world's record.
Putting 16-lb. shot.....	R. Sheldon, N. Y. A. C.	McCracken, Penn.....	Garrett, ex-Princeton.....	1st, 46 ft. 3 1-8 in.; 2d, 42 ft. 2 in.; 3d, 40 ft. 7 in.
Throwing discus.....	Bauer, Hungary.....	Janda, Bohemia.....	R. Sheldon, N. Y. A. C....	1st, 118 ft. 2 9-10 in.; 2d, 115 ft. 3 46-100 in.; 3d, 113 ft. 6 1-5 in.
Running high jump.....	Baxter, ex-Penn.....	Leahy, Ireland.....	Goenzy, Hungary.....	1st, 6 ft. 2 4-5 in.; 2d, 5 ft. 9 3-10 in.; 3d, 5 ft. 8 9-10 in.
Running broad jump.....	Kraenzlein, Penn.....	Prinstein, Syracuse.....	Leahy, Ireland.....	1st, 23 ft. 6 7⁄8 in.; 2d, 23 ft. 6 3-10 in.; 3d, 22 ft. 4 ¾ in.
Pole vault.....	Baxter, ex-Penn.....	Colket, Penn.....	Andersen, Norway.....	1st, 10 ft. 9-10 in.; 2d, 10 ft. 6 4-10 in.; 3d, 10 ft. 6 in.
OTHER SCRATCH EVENTS.				
60-meter run (65.62 yds.).....	Kraenzlein, Penn.....	Tewksbury, ex-Penn.....	Rowley, Australia.....	7 sec.; world's record.
200-meter run (218.72 yds.).....	Tewksbury, ex-Penn.....	Pritchard, India.....	Rowley, Australia.....	22 1-5 sec.; won by 6 inches.
4,000-meter steeplechase (2 miles, 850.44 yds.).....	Rimmer, England.....	Bennett, England.....	Robinson, England.....	12 min. 58 2-5 sec.; Orton, Grant, and McLean unplaced.
200-meter hurdle race (218.72 yds.)	Kraenzlein, Penn.....	Pritchard, India.....	Tewksbury, ex-Penn.....	25 2-5 sec.; won with great ease; world's record.
Standing high jump.....	Ewry, N. Y. A. C.....	Baxter, ex-Penn.....	L. P. Sheldon, N. Y. A. C.	1st, 5 ft. 4 96-100 in.; 2d, 5 ft. 4-10 in.; 3d, 4 ft. 11 6-10 in.
Standing broad jump.....	Ewry, N. Y. A. C.....	Baxter, ex-Penn.....	Torchbœuf, France.....	1st, 10 ft. 6 4-10 in.; 2d, 10 ft. 3 4-10 in.; 3d, 9 ft. 11 3-10 in.
Standing triple jump.....	Ewry, N. Y. A. C.....	Baxter, ex-Penn.....	Garrett, ex-Princeton.....	1st, 34 ft. 8 1-2 in.; 2d, 32 ft. 7 3-4 in.; 3d, 31 ft. 2 in.
Running hop, skip, and jump.....	Prinstein, Syracuse.....	Connelly, East Boston...	L. P. Sheldon, N. Y. A. C...	1st, 47 ft. 5 1-4 in.; 2d, 45 ft. 10 in.; 3d, 44 ft. 9 in.
Throwing 16-lb. hammer.....	Flanagan, N. Y. A. C...	Hare, Penn.....	McCracken, Penn.....	1st, 167 ft. 4 in.; 2d, 151 ft. 9 in.; 3d, 143 ft.
Tug-of-war.....	America.....	Sweden.....	France.....	Impromptu team twice defeated Sweden, which had defeated France, included Flanagan, Hare, McCracken, Garrett, R. and L. P. Sheldon.
National team race, 5,000 meters (3 miles, 188.06 yds.).....	England.....	France.....	.....	15 min. 29 1-5 sec.; no third competitor.
"Marathon" race, 40 kilometers (24.85 miles).....	Teato, France.....	Emile, France.....	France.....	Winner 2 hours 59 min. Newton, American, ran fifth.

THE HARNESS HORSE.

THAT the famine in desirable and even useful horseflesh which has for years been predicted by every horseman familiar with existing conditions is upon us, is a fact which is becoming more patent as "day succeeds unto day." The scarcity is not limited to any variety or to any class, but is universal, from the supply of general-purpose animals up through all successive gradations of business, draught, heavy and light harness, trotting, and race horses. As usual, however, the stress is felt most severely in the line of the trotting-bred animal, which, starting in life as the fast roadster or trotter for racing purposes, develops, should latent merit exist, into the heavy-harness horse for fashionable use. All over the country one trotting meeting after another has had to either abandon or curtail its programme through absence or paucity of entries.

Arguments have been advanced that this state of affairs was the result, firstly, of the enormous increase in road driving, caused by the introduction in so many cities of speedways and of so-called *matinée* races for amateur drivers; secondly, that fewer colts have been handled and developed than usual; thirdly, that the market had become too exacting; fourthly, that the enormous export trade had devoured everything choice in the country, etc., etc. There is truth in all these reasonings; but, when all is said and done, the real issue is overlooked, and this is, that we have marketed, during the recent depression in values, about every stallion and mare which would at all answer for fashionable use, and that not only has no breeding been going on for some years, but the country is absolutely denuded of decent producing material.

What the outcome is to be only the future can decide; but three things are certain: That horses of all classes will reach in the next five years values hitherto undreamed of; that all existing requirements concerning matters of soundness will have to be greatly modified; and that strains of blood and varieties of the horse which have hitherto been despised or neglected will be heavily drawn upon, and will bear a most important part in producing not only the heavy, but the light harness horse of the future.

As bearing upon the matter, a most interesting and necessary experiment is to be tried this autumn. An importation of Russian trotting-bred carriage horses is to be made into this country, and these animals, said to be superb individuals, are to be placed upon the New

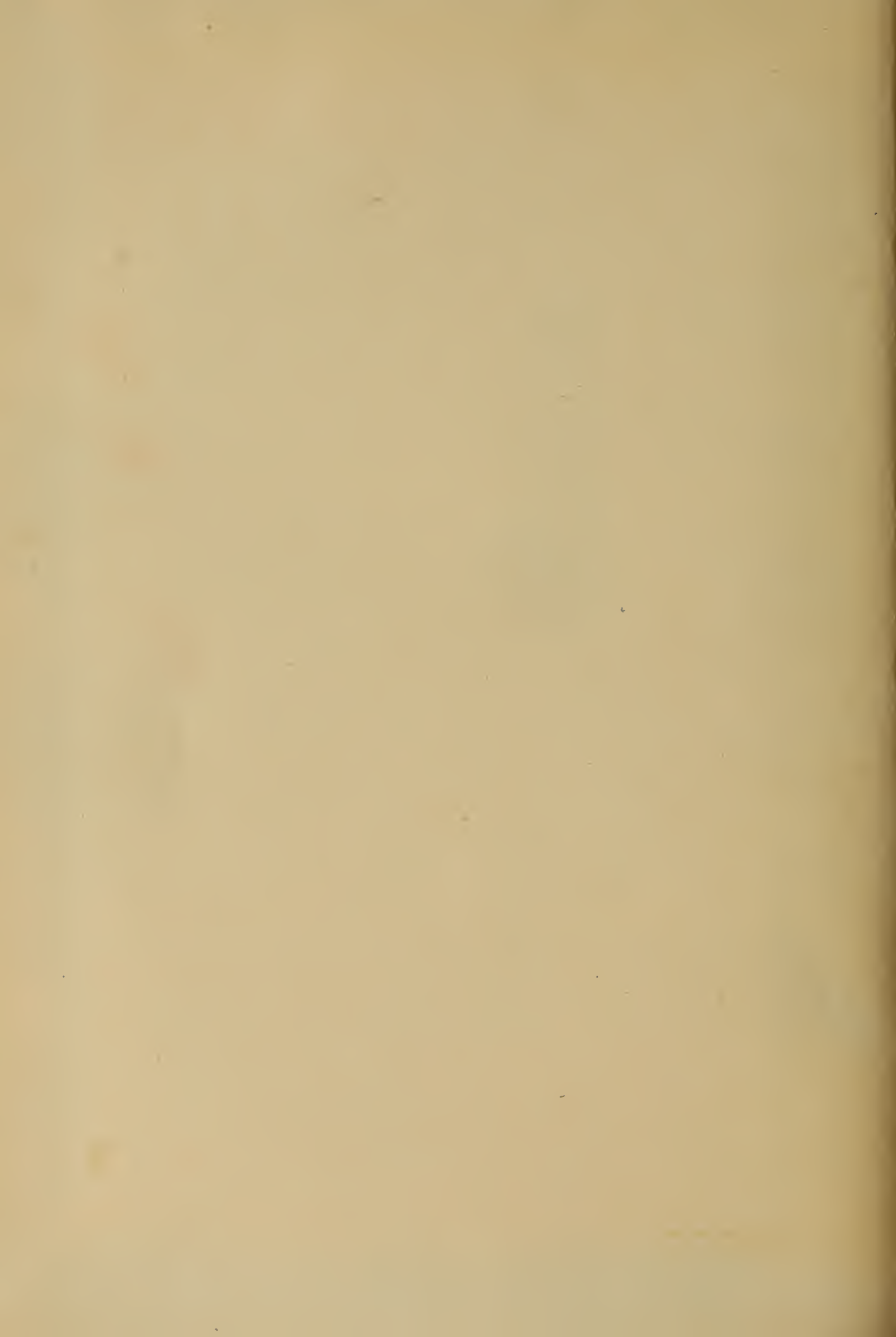
York market for fashionable use. These horses, mostly of the Orloff strain, are all 15.3 hands or over, and it is said that, for the "seven royal s's"—shape, size, soundness, speed, style, substance, and sagacity—nothing equaling them has ever been seen in America. A few animals of this blood have been previously imported into this country, and while some were only fair specimens, one horse, which stood in the Genesee Valley, has sired a large number of most desirable animals that could step and go as well as stay, and which have in many instances commanded fancy prices. Certainly such sires as these would seem to have merits which neither the Hackney nor the French coach horse, or the trotter, have as yet proved themselves to surely possess.

THE season's horse shows all over the country have proved how great, how healthy, and how steadily increasing is the public interest in the horse and his belongings. The bicycle, the automobile, and every other outdoor sport have directly benefited the horse business, and are steadily continuing to do so. No machine can endure as a means of pleasure-giving sport against the fascination of companionship and association with the living quadruped, and the taste for outdoor exercise engendered by the one redounds ultimately to the profit of the other.

While the attendance at all horse shows has been very large and attentive, the entry lists, through the scarcity of available material, have been but sparsely filled, and interest has flagged through constant appearance in class after class of the same animals, which bore off ribbon after ribbon, free from dangerous competition. Not a few of these were veterans of several years' standing, and their performances do but serve to accentuate the imminence of the horse famine at hand, for their winnings were not infrequently due more to the impossibility of finding anything half-decent to show against them than to their own prowess or transcendent merit.

THE presence of the professional and the dealer as competitors at all shows is becoming more general, and it is greatly to be deplored that such is the fact. It is only a question of time when all executives must take the matter up, and restrict these competitions in some way so that the genuine amateur may be encouraged in every possible way, and the people who show *for* business, or *as* business, be put in classes by themselves.

F. M. WARE.



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